

MAHARASHTRA STATE ELECTRICITY TRANSMISSION CO.LTD.
CIN NO. U40109MH2005SGC153646

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Ref. No. ED/MSLDC/OP/GCC/

Date:

To,
As per mailing list GCC Core Group Members.

Sub: - Agenda for 9th Grid Coordination Committee (GCC) Meeting scheduled on 11.07.2024 at 11:00 hrs. at SLDC, Kalwa.

Ref.: 1. T.O.L. No. ED/MSLDC/OP/GCC/876 dated 08.05.2024.
2. MoM Circulated vide MSLDC/TECH/OP/GCC/2240 Dated. 21.12.2023.

Dear Sir,

In reference to the above subject, it is to convey that as per directives from the Director (Operations), MSETCL, Chairman GCC, the 9th meeting of the GCC core group will be held as per following: -

Date of Meeting: 11.07.2024
Time of Meeting: 11:00 hrs.
Venue: 3rd Floor Conference Hall, SLDC, Kalwa.

The agenda for the said meeting is attached herewith.

It is requested to kindly make it convenient to attend the meeting physically. However, in case of any work exigencies, meeting may be attended through V.C for which the link will be shared.

Thanking you.

With regards,

Encl: As above.

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

Copy s.w.r. to:

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

Copy to:

The Chief Engineer (STU), Corporate Office, MSETCL, Mumbai.
The Chief Engineer (ACI&P), Corporate Office, MSETCL, Mumbai.
The Chief Engineer (SLDC), Airoli, Navi Mumbai.

*Agenda for 9th Grid Coordination Committee (GCC) Meeting scheduled on 11.07.2024 at 11:00 hrs. at
SLDC, Kalwa.*

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- 26592162	dirop@mahatransco.in
2	MSEDCL	Shri. Yogesh Gadkari Director (Commercial)	Member	022- 26474211 / 26472131	directorcommsedcl@gmail.com
3	MSETCL	(Vacant) Executive Director (Trans)	Member	-	edtrans@mahatransco.in
4	MSPGCL	Shri. Sunil Sonpethkar CE (Works)	Member	8411958588	cegw@mahagenco.in
5	WRPC	Shri P. D. Lone, S.E. Commercial	Member	9867622823	comml-wrpc@nic.in
6	MEDA	Shri Manoj Pise, General Manager	Member	9422319093	gmr@mahaurja.com
7	MSLDC	Shashank Jewalikar Executive Director (SLDC) (I/c)	Member Convener	022- 27301931	edmseholding@gmail.com

Agenda for 9th Grid Co-ordination Committee meeting scheduled on 11th July 2024 at 11:00 Hrs. at SLDC, Kalwa.

Agenda Points: -

1.

1.1 Confirmation of the Minutes of the 8th GCC Meeting held on 04.12.2023

1.2 Presentation on Maharashtra System Grid performance from pervious GCC meeting-

Annexure 1

1.3 Grid Alerts/Occurrences experienced by Maharashtra from December 2023 till date:

Annexure 1.1

1.4 Status of Pending projects required by WRPC in 577th OCCM:

High Loading in 400 kV Pune Chakan:

220kV Karjat-Jeur D/C construction was to be completed by the end of April 2024. After charging of 220kV Karjat-Jeur D/C line, 400kV Karad -Solapur (PG) can be restored immediately.

Low Voltage Issues in Maharashtra System:

a) 1315 MVAR, 710 MVAR &160 MVAR compensation planned at Pune, Vashi and Nasik respectively. Tender work in progress. Expected to be commissioned in Sep-Oct 2024.

(Annexure 1.2 enclosed)

b) Revised studies are being carried out for STATCOM. Study results required.

Project progress for power evacuation outlets from PGCIL substations i.e.400/220kV Talegaon (PG) and 765/400kV Shikrapur (PG).

1.5 Submission of Annual MSLDC Report in CY 2023 **(Annexure 1.3 enclosed)**

2. MSLDC Agenda:

2.1 Draft Procedure for computation of monthly TTC /ATC and Interconnection studies:

In accordance with the CERC GNA regulation the TTC/ATC and six months ahead interconnection studies are to be carried out by each state on monthly basis. Accordingly, Hon. CERC has issued a detailed procedure in the said subject which is to be followed by RLDC and states. Hence a draft procedure for computation of monthly TTC /ATC and Interconnection studies has been prepared by MSLDC under the provision of 28.2 of the MEGC in consultation with the stakeholders. The Draft Procedure as prepared by MSLDC is attached in **Annexure 2**.

The draft procedure was discussed in the 7th OCC meeting held on 14.02.2024 at MSLDC. In the said meeting, OCC has recommended the draft procedure to GCC for further ratification. Further, the chairman of the OCC has directed MSLDC to formulate a Working Group for undertaking

various activities envisaged in the said draft procedure & initiate required activities. Accordingly, vide letter dated 10.05.2024, MSLDC has constituted a Working Group. The copy of the same is attached as **Annexure-3**. Further, MSLDC has submitted PSSE Case files at four cardinal points to WRLDC for the month of November-2024 & May-2025 on 14.05.2024.

Members may like to discuss and ratify.

2.2 Validation of various relay settings of Mumbai Islanding Scheme through Dynamic Studies:

On the backdrop of the partial grid failure in Mumbai & MMR area on 12.10.2020, the High-Level Committee constituted by Hon'ble MERC had issued various recommendations, wherein formation of special group for monitoring Mumbai Islanding Scheme was one of the recommendations. Accordingly, a Special Group, "Mumbai Islanding Group" has been constituted on 09.04.2021 under the chairmanship of the Executive Director (MSLDC). All the stake holders in the MMR & Mumbai are the members of the said group. Further, CEA Committee, in its report on same occurrence has suggested to validate the Mumbai Islanding Scheme relay settings through dynamic studies.

Accordingly, MSLDC has issued work order to VJTI for validation of various relay settings under Mumbai Islanding Scheme through Dynamic Stability Studies. VJTI has carried out the required studies & submitted draft report on 08.07.2023. In the draft report, it has been stated that the existing relay settings are in order and do not require any changes. The said draft report was discussed in the Mumbai Islanding Group meeting held on 23.09.2023 wherein group has accepted the report. Accordingly, VJTI has submitted final report on 02.03.2024.

The important observations & recommendations in the report are as below:

- a) The last stage of load shedding at National level is set at 48.8 Hz (triggering), the effect of load shedding considering delays of -100 msec validation time and 40 msec breaker operating time is expected at 48.66 Hz (with 1 Hz/sec ROCOF) & 48.52 Hz (with 2 Hz/sec ROCOF). **In any case, it is safe to start load shedding in Mumbai at 48.4 Hz** as all efforts to save the grid at National level could have been done by the time frequency comes down to 48.52 Hz.
- b) In case of disturbances emanating outside the State of Maharashtra, **Mumbai islanding scheme with settings implemented presently can cope up well and survives**. Further load shedding done at 48.4 Hz in Mumbai helps National grid and islanding trigger frequency (47.9 Hz) not expected to come.
- c) In all the future hypothetical disturbance scenarios, **after cascade tripping of 400 KV lines, the pattern of disturbance propagation on 220 kV network is almost similar to the sequence of events that occurred on 12th October 2020**.
- d) In all the future hypothetical disturbance scenarios, the real threat to Mumbai system starts from the event that is formation of Mumbai plus MMR island. **Due to load far exceeding generation in the Island, ROCOF as high as 4 Hz/sec to 8 Hz/sec is seen in dynamic simulations and the challenge mainly is to counter such high df/dt. It is therefore, prudent to consider formation of Mumbai plus MMR island as reference contingency to test the robustness of Mumbai Islanding scheme.**

- e) **The revised settings (post 12th Oct 2020 disturbance) are appropriate and validated by the simulation for different scenarios built from FY 2023-24 to FY 2027-28 considering network augmentations, variations in load generation balance and import from grid, phasing out of generation in Mumbai, impact of inertia, etc.**
- f) A load flow and dynamic simulation case is formulated for FY 2023-24 scenario of maximum demand in which similar load shedding schemes deployed in MMR also. However, **dependence on MMR load shedding is not recommended, Mumbai load should also be curtailed.** Carrying out load shedding in MMR slightly before load shedding in Mumbai is also studied but could be of little help. **Load shedding in MMR set at 49.2 Hz, 0.5 Hz/sec and 48.5 Hz (for slow frequency events) is also studied but no significant improvement found.**
- g) Transient stability, voltage stability and thermal limit constraints to limit the capability of any transmission network and TTC is the minimum of these constraints. As system operating conditions change, the most restrictive limit on TTC may change from one kind of limit to the other. Generally speaking, for Mumbai system, since internal generation is reducing while import is increasing, the restrictive limit that has most bearing would be the stability limit. **Mumbai system cannot operate with multiple trippings of 400 kV lines unless TTC/ATC is revised in real time and accordingly the import has to be curtailed and internal generation has to be increased (typically hydro pick up followed by manual load shedding). While transmission depletion is occurring the import TTC/ATC has to be considered with stability limit and TRM has to be increased to provide good margins (not 2% of real time demand but much higher based on low probability high impact contingencies).**
- h) It is recommended **to continue with some of the excellent features of present islanding scheme such as dynamic load shedding, automatic load restoration in case of frequency above 51 Hz** shall be continued in the future islanding schemes - South Mumbai islanding scheme and small islands suggested.
- i) Due to maximum import, load shedding would be very high which may cause over voltages and over fluxing which may lead to tripping of units just after islanding. **It is recommended to convert generators which are de-commissioned into synchronous condensers to help in voltage control and to supplement inertia for lowering df/dt and help in frequency recovery.**
- j) Due to growth in Mumbai load demand and consequent increase in import **it is preferable to have two small islands- one for South Mumbai and another for AEML.** The South Mumbai Island could be similar to that occurred during the disturbance on 27th February 2022 and can carry on till FY 2027-28 and as long as Trombay Unit-5 is not de-commissioned. After de-commissioning of Trombay unit-5, units 7A & 7B, smaller island in South Mumbai using generation of Trombay 8 could be appropriate.
- k) In case of AEML, **the present North Mumbai sub-island with Dahanu units and full/part load of North Mumbai can continue till VSC based HVDC is commissioned.** Another new island can be conceived after VSC based HVDC is commissioned (de-commissioning of Dahanu units can be coordinated with commissioning of HVDC).

- l) **The future South Mumbai Island may also require 100 MW BESS either at Trombay or several BESS distributed at 3 or 4 locations amounting to 100 MW to help in counter acting high ROCOF** just before islanding and to ensure safe islanding by reducing df/dt and also to support islanded operation with traction loads being essential loads in South Mumbai. BESS with 50% of SOC, can pick up full capacity within 0.2 to 0.5 seconds.
- m) **Oscillations are seen in frequency & voltage of Trombay and Dahanu units in some of the dynamic simulation cases, possibly due to low damping**, however, settled within 5 seconds. The frequency of oscillation observed is around 1.2 Hz. It is pertinent to note that due to significant amount of load shedding, system damping gets reduced. When frequency recovery is taking place, oscillations seen in frequency (TPC and AEML generators in phase opposition) of around 1.2 Hz (not inter-area oscillations). However, oscillations damped out within 5 seconds in most cases. Since, frequency did not come down up to 47.6 Hz in some of the cases, sub-islanding did not occur. **However, in case oscillations during frequency recovery continue for more than 5 seconds, it would be appropriate to separate TPC and AEML systems. This is one of the reasons, separate islanding schemes are proposed for TPC and AEML.**
- n) In cases where embedded generation is around 1000 MW (340 MW in AEML and 600 MW in TPC), ROCOF is generally below 6 Hz/sec. Due to adequate inertia, frequency decay and recovery are good enough to have a safe islanding without causing under-frequency tripping of generators and sufficient time to carry out load shedding. However, over voltages and over fluxing are a matter of concern. It is understood that line/bus reactors are planned in TPC and some of these are commissioned/under commissioning.
- o) In cases of high import and phasing out of generation, ROCOF is seen around 8 Hz/sec due to low inertia and high overloads in the system during disturbances. Little time is available for carrying out counter measures like UF load shedding in time to limit frequency decay well above generator under frequency trip settings. **Phasing out of generation in AEML system should be after commissioning of Kudus-Aarey VSC based HVDC and in TPC system phasing out schedule should match with commissioning of Vikhroli Phase II system.** Vikhroli Phase I strengthens the transmission from Talegaon-PG and conversion of HTLS of 400 kV Kalwa-Padghe D/C strengthens transmission from Padghe MSETCL. **Further, smaller islands can be planned for both South Mumbai as well as North Mumbai. South Mumbai Island can be commissioned matching with the time lines of Vikhorli Phase II (by FY 2024-25).** After phasing out of Trombay units- 5, 7A & 7B, TPC can go for smaller islands with Carnac, Backbay and some traction loads in South Mumbai.
- p) **ROCOF around 8 Hz/sec is seen as a major threat** for successful islanding of Mumbai system and to handle such high ROCOF two-pronged approach is suggested. **By converting phased out generating units as synchronous condensers**, system inertia could be improved. Since, India is harnessing high RE generation in the near future, inertia is bound to get reduced even for the National Grid. **Maharashtra being RE rich State, having synchronous condensers in Mumbai would help the State as well as National Grid** in addition to significantly improving the performance of islanding process and islanding operation of Mumbai. **The other requirement for Mumbai Island would be to go in for BESS of 100**

MW at Trombay or distributed across few s/s in South Mumbai island and future small islands (TPC area) in order to reduce generation/import deficiency at the time of islanding as BESS can pick up full capacity (from 50 % SOC) within 0.25 to 0.5 seconds (2 p.u./sec to 20 p.u./sec ramp up/down rates) to be triggered using 49 Hz, 0.5 Hz/sec signal (the same that triggers UF load shedding). The battery can also control over frequency in case of excessive load shedding during islanding and compliments turbine governors. BESS can also help in countering frequency fluctuations during island operations due to traction loads. **BESS is required for 2 to 3 hours of island operation till hydro generators are black-started and start picking up loads.**

- q) The early warning system proposed in chapter 7 is based on bus positive sequence voltage angles and frequencies obtained from several nodes (Mumbai, MMR, outside MMR) in dynamic simulations. The data granularity is 10ms (lower is also possible). As MSLDC is going to have additional PMUs in Mumbai and MMR and outside MMR in Maharashtra reporting at 25/50 phasors per second which can give angle information and frequency at granularity of 40/20 msec. **For the purpose of SPS, it is possible to have PMUs of P-Class (protection class) reporting at 100 phasors per second with data granularity of 10 msec.**

Members may like to discuss

2.3 Procedure to recover ‘Increment in Generation (VSE)’ charges while availing outages proposed for Third party ORC work in Maharashtra Grid:

During major outages for ORC (Outright Contract) works in Mumbai/MMR & Pune area, due to any system constraints, the costlier Mumbai embedded generation, Nasik generation & Koyna hydro is required to be picked up as per requirement to maintain system ‘N-1’ compliant and to resolve the system constraints. This causes additional burden on the DSM pool. In this respect, MSLDC enquired with such stake holders whether such additional burden needs to be shared by the agency carrying out such ORC works. This scenario is similar to the charges levied by Indian Railways to transmission/distribution licensees for granting power/ traffic blocks.

The subject was discussed in 6th OCC meeting dtd 18.08.2023, the procedure for the same is being formulated in accordance with the Regulation No. 28.2 (f) of the MEGC, 2020 and directives of GCC.

Members may like to discuss

2.4 6th PCC and MCCC meeting: NIL

3. Agenda Point received from MSEDCL:

MSEDCL's actual drawl available on MSLDC's SCADA screen:

MSEDCL had requested SLDC to share the logic / formula as incorporated by MSLDC to arrive at actual drawl of MSEDCL along with a request to display real time "Mahadiscom total demand" on SCADA screen. However, MSLDC has shared the information from which actual drawl of MSEDCL cannot be found. Further, MSLDC informed that the demand forecasting is the responsibility of concerned Discom and the SCADA data is meant for SLDC operation purpose. In intra-day, Load-Generation balance is achieved automatically by auto-operation of decentralized MoD for each 15-minute time block. Thus, the despatch instructions are issued to the intrastate generators through SLDC DSM software based on the data available with SLDC. MSLDC is requested to clarify, based on which data SLDC DSM scheduling software is issuing scheduling instructions to generators. SLDC has stated that the SCADA data is meant for SLDC operation purpose and not to be used for demand estimation. It is pertinent to point out that MSEDCL is not using the SCADA data for demand forecasting, but has to use it for real time operations to minimize the deviations. Therefore, it is requested to clarify whether SLDC is using data available on SCADA to issue schedule up/down instructions to MSEDCL's contracted generators through software or using different data?

In this regards, MSEDCL concerns are as follows:

- a) If SLDC is using SCADA data, which deviates significantly from actual data recorded by interface meters and means that SLDC operation is based on erroneous data which financially affecting MSEDCL by contributing to deviation and deviation charges thereon.
- b) If SLDC is using different data, then SLDC shall clarify about it and if it is in sync with interface meter data of all MSEDCL drawal points, then such data (MSEDCL's real time demand) needs to be displayed on SCADA screen so that in real time MSEDCL can take corrective actions to minimize deviations and deviation charges.

The Commission, in its order dtd 29.11.2020 in case no 114 of 2020 has acknowledged the fact that the availability of SCADA will provide MSEDCL the visibility of its real time drawal. The Commission has also noted that MSEDCL has been raising this issue time and again. Further, Hon'ble Commission has directed as bellows:

*7.64. The Commission in its Statement of Reasons (SOR) to DSM Regulations has dealt with the issue of SCADA visibility and preparedness for DSM implementation. Further, Metering and Communication Coordination Committee to be constituted under the MERC (State Grid Code) Regulations 2020, inter alia, would be required to undertake a periodic review of SCADA visibility of all Drawal and injection points. For establishing connectivity and communication link at T<>D interface for drawal point of Distribution Licensee to ensure visibility to MSLDC is responsibility of STU. **Hence, STU should come up with a concrete and cost-effective and timely implementable plan within 3 months in consultation with the Grid Co-ordination Committee for implementation of SCADA to ensure required real time visibility at MSLDC.***

MSEDCL vide its letter dtd 19.04.2022 had requested to take up this matter with concerned MSETCL office to arrange for display of actual real time drawl data of MSEDCL. However, despite the directives of Hon'ble Commission in the subject matter and repeated requests by MSEDCL, the actual real time drawl data of MSEDCL is yet not displayed on SCADA screen.

4. Agenda Points received from STU:

4.1 Procurement of 4 Nos. of van mounted underground EHV cable fault locator system to detect & locate the fault in underground cable in MSETCL upto 400KV level.

After detailed deliberation and discussion, the committee recommended the said proposals of Procurement of 4 Nos. of van mounted underground EHV cable fault locator system to detect & locate the fault in underground cable in MSETCL upto 400kV level for submission to GCC for approval.

4.2 Scheme of Augmentation by providing additional 3x500MVA, 765/400/33kV ICT with HV and IV bays along with 400kV Interconnection line between ICT-III IV side to 400kV Bus at 765kV R.S. Ektuni in Aurangabad zone

After detailed deliberation and discussion, the committee recommended the said proposals of Scheme of Augmentation by providing additional 3x500MVA, 765/400/33kV ICT with HV and IV bays along with 400kV Interconnection line between ICT-III IV side to 400kV Bus at 765kV R.S. Ektuni in Aurangabad zone for submission to GCC for approval.

4.3 Scheme of Augmentation by providing Additional 1x100MVA, 220/132kV ICT along with HV & LV bays and allied civil works at 220kV Malkapur (Dharangaon) S/s under EHV O&M division, Buldhana in Amravati Zone

After detailed deliberation and discussion by members, the committee recommended the above proposal of Scheme of Augmentation by providing Additional 1x100MVA, 220/132kV ICT along with HV & LV bays and allied civil works at 220kV Malkapur (Dharangaon) S/s under EHV O&M division, Buldhana in Amravati Zone for submission to GCC for approval.

4.4 Scheme of Augmentation by providing Additional 1x25MVA, 132/33kV T/F along with HV & LV bays and 33kV PT bay at 132kV Arni S/s under EHV O&M division, Yavatmal in Amravati Zone

After detailed deliberation and discussion, the committee recommended the above proposal of Scheme of Augmentation by providing Additional 1x25MVA, 132/33kV T/F along with HV & LV bays and 33kV PT bay at 132kV Arni S/s under EHV O&M division, Yavatmal in Amravati Zone for submission to GCC for approval.

4.5 Scheme of Augmentation by providing Additional 1x50MVA, 220/33kV T/F along with HV & LV bays at 220kV Kekatnimbhora S/s under Bhusawal Circle in Nashik Zone

After detailed deliberation and discussion, the committee recommended the above proposal of Scheme of Augmentation by providing Additional 1x50MVA, 220/33kV T/F along with HV & LV bays at 220kV Kekatnimbhora S/s under Bhusawal Circle in Nashik Zone for submission to GCC for approval.

4.6 Scheme of Augmentation by providing Additional 1x50MVA, 220/33kV T/F along with HV & LV bays at 220kV Satana S/s under Nashik Circle in Nashik Zone

After detailed deliberation and discussion, the committee recommended the above proposal of Scheme of Augmentation by providing Additional 1x50MVA, 220/33kV T/F along with HV & LV bays at 220kV Satana S/s under Nashik Circle in Nashik Zone for submission to GCC for approval.

4.7 Scheme of Augmentation by addition of 3X167 MVA, 400/220/33kV ICT-4 with extension of RRS upto existing 167MVA, 400/220/33kV Spare ICT-2 at 400kV R.S. Dhule under Nashik zone.

After detailed deliberation and discussion, the committee recommended the above proposal of Scheme of Augmentation by addition of 3X167 MVA, 400/220/33kV ICT-4 with extension of RRS upto existing 167MVA, 400/220/33kV Spare ICT-2 at 400kV R.S. Dhule under Nashik zone. for submission to GCC for approval.

4.8 Scheme for Augmentation by providing additional 50 MVA, 132/33 kV T/F along with HV & LV Bays with 33kV Bus extension at 132 kV Mohol substation under EHV (O&M) Division, Solapur in Pune zone.

After detailed deliberation and discussion, the committee recommended the above proposal of Scheme for Augmentation by providing additional 50 MVA, 132/33 kV T/F along with HV & LV Bays with 33kV Bus extension at 132 kV Mohol substation under EHV (O&M) Division, Solapur in Pune zone. for submission to GCC for approval.

4.9 Scheme of Augmentation by providing additional 3X167MVA, 400/220/33kV ICT-IV along with spare ICT unit and HV & LV Bays at 400kV Kharghar S/s under Panvel Circle in Vashi Zone

After detailed deliberation and discussion, the committee recommended the above proposal of Scheme of Augmentation by providing additional 3X167MVA, 400/220/33kV ICT-IV along with spare ICT unit and HV & LV Bays at 400kV Kharghar S/s under Panvel Circle in Vashi Zone for submission to GCC for approval.

4.10 Scheme of Second Circuit Stringing on a) 132kV Gangapur-Vaijapur, b) 132kV Jalna(old)-Partur, c) 132kV Jalkot - Udgir, d) 132kV Nilanga - Omerga, e) 132kV Georai(220kV s/s) - Mahakala, f) 132kV Bhokar - Tamsa & g) 132kV Bhokar - Himayatnagar SCDC lines along with construction of associated end bays under Aurangabad zone

After detailed deliberation and discussion, the committee recommended the above scheme of Second Circuit Stringing on a) 132kV Gangapur-Vaijapur, b) 132kV Jalna(old)-Partur, c) 132kV Jalkot - Udgir, d) 132kV Nilanga - Omerga, e) 132kV Georai(220kV s/s) - Mahakala, f) 132kV Bhokar - Tamsa & g) 132kV Bhokar - Himayatnagar SCDC lines along with construction of associated end bays under Aurangabad zone for submission to GCC for approval.

4.11 Scheme for second circuit stringing on various EHV lines under Karad zone

- 1) 220kV Ghatnandre-waifale
- 2) 132kV Lonand-Phaltan
- 3) 110kV Mudshingi-Puikhadi

After detailed deliberation and discussion, the committee recommended the above Scheme for second circuit stringing on 220kV Ghatnandre-waifale, 132kV Lonand-Phaltan, 110kV Mudshingi-Puikhadi EHV lines under Karad zone for submission to GCC for approval.

4.12 Scheme for work of LILO arrangement of 132kV Deepnagar-Muktai nagar line along with 132kV bays at Varangaon substation under EHV O&M Dn. Jalgaon under EHV O&M Circle, Bhusawal.

After detailed deliberation and discussion, the committee recommended the above proposal of Scheme for work of LILO arrangement of 132kV Deepnagar-Muktai nagar line along with 132kV bays at Varangaon substation under EHV O&M Dn. Jalgaon under EHV O&M Circle, Bhusawal for submission to GCC for approval.

4.13 Second circuit stringing along with end bays in r/o o (i) 132 kV Bambhori-Erondol Line -26.77 ckm. (ii) 132 kV Alephata-Ghargaon -30.82 ckm. (iii) 132 kV Dondaicha-Shirpur line- 53ckm. (iv) 220 kV Gangapur-Valve line 12 ckm. under EHV PC O&M Zone Nashik.

After detailed deliberation and discussion, the committee recommended the above proposal of Second circuit stringing along with end bays in r/o o (i) 132 kV Bambhori-Erondol Line -26.77 ckm. (ii) 132 kV Alephata-Ghargaon -30.82 ckm (iii) 132 kV Dondaicha-Shirpur line- 53ckm (iv) 220 kV Gangapur-Valve line 12 ckm under EHV PC O&M Zone Nashik for submission to GCC for approval.

4.14 Second circuit stringing in r/o (i) 132 KV Katol – Warud line (42.2KM) along with end bays & PT bay under EHV O&M Division, Nagpur. (ii) 132kV Ashti – Alapalli line (63.7KM) along with end bays under EHV O&M Division, Ballarshah.

After detailed deliberation and discussion, the committee recommended the above proposal of Second circuit stringing in r/o (i) 132 KV Katol – Warud line (42.2KM) along with end bays & PT bay under EHV O&M Division, Nagpur (ii) 132kV Ashti – Alapalli line (63.7KM) along with end bays under EHV O&M Division, Ballarshah. for submission to GCC for approval.

4.15 The scheme of Design, Supply, Installation, Testing and Commissioning of Capacitor banks of voltage ratings of 11kV, 22kV, 33kV, 100kV, 132kV & 220kV at various EHV substations under Nashik, Pune and Vashi Zone under Phase-VI.

After detailed deliberation and discussion, the committee recommended the above proposal of “The scheme of Design, Supply, Installation, Testing and Commissioning of Capacitor banks of voltage ratings of 11kV, 22kV, 33kV, 100kV, 132kV & 220kV at various EHV substations under Nashik, Pune and Vashi Zone under Phase-VI”, for submission to GCC for approval.

4.16 Scheme of procurement of 03 Nos. of Power Transformers and 02 Nos of ICTs as emergency/critical spares for Vashi Zone by keeping aside the spare policy in view of criticality of Vashi Zone.

After detailed deliberation and discussion, the committee recommended the above proposal of Scheme of procurement of 03 Nos of Power Transformers and 02 Nos of ICTs as emergency/critical spares for Vashi Zone by keeping aside the spare policy in view of criticality of Vashi Zone for submission to GCC for approval.

4.17 Scheme of Supply, Installation, Testing & Commissioning of new 400kV, 125MVA Bus Reactor at 400kV R S New Koyna S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Scheme of Supply, Installation, Testing & Commissioning of new 400kV, 125MVA Bus Reactor at 400kV R S New Koyna S/s. for submission to GCC for approval.

4.18 Scheme of procurement of 12 Nos of 25MVA, 132/11kV & 02 nos. of 25MVA, 110/11kV EHV Power Transformers having 11kV Secondary voltage as emergency /critical spares for all zones of MSETCL.

After detailed deliberation and discussion, the committee recommended the above proposal of Scheme of procurement of 12 Nos of 25MVA, 132/11kV & 02 nos. of 25MVA, 110/11kV EHV Power Transformers having 11kV Secondary voltage as emergency /critical spares for all zones of MSETCL. for submission to GCC for approval.

4.19 Establishment of 132/33kV substation at Fulsawangi, Dist: Yavatmal under EHV O&M circle Amaravati.

After detailed deliberation and discussion, the committee recommended the above proposal of Establishment of 132/33kV substation at Fulsawangi, Dist: Yavatmal under EHV O&M circle Amaravati for submission to GCC for approval.

4.20 Establishment of 400 / 220 kV Nandagaon Peth Substation and associated Lines, District Amravati under EHV O&M Circle Amravati.

After detailed deliberation and discussion, the committee recommended the above proposal of Establishment of 400 / 220 kV Nandagaon Peth Substation and associated Lines, District Amravati under EHV O&M Circle Amravati for submission to GCC for approval.

4.21 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

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.

4.22 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

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.

4.23 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

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.

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

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.

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

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.

4.26 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.

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.

4.27 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.

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.

4.28 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.

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.

4.29 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

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.

4.30 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.

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.

4.31 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.

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.

4.32 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.

After detailed deliberation and discussion, the committee recommended the above proposal of 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.

4.33 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.

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.

4.34 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

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.

4.35 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

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.

4.36 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.

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.

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

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.

4.38 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 Sambhajnagar

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 Sambhajnagar, for submission to GCC for approval.

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

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.

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

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.

4.41 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.

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.

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

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.

4.43 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.

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.

4.44 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.

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.

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

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.

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

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.

4.47 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

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.

4.48 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.

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.

4.49 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

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.

4.50 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

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.

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

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.

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

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.

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

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.

4.54 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.

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.

4.55 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

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 Nandgaon peth – Amravati

SC line for RE power evacuation under Green Energy Corridor (GEC) under Amravati zone, for submission to GCC for approval.

4.56 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 Sambhaji nagar zone

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 Sambhaji nagar zone, for submission to GCC for approval.

4.57 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

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.

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

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.

4.59 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.

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.

4.60 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.

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.

4.61 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.

After detailed deliberation and discussion, the committee recommended the above proposal of Replacement of 1X25 MVA, 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.

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

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.

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

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.

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

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.

4.65 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.

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.

4.66 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.

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.

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

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.

4.68 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

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.

4.69 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

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.

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

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.

4.71 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

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.

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

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.

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

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.

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

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 Vighnagar-132kV Mahindra Forging line - 9.9 km, for submission to GCC for approval.

4.75 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.

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.

4.76 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.

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.

4.77 132 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

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.

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

A meeting was convened on 30.04.2024 for discussion of the issue of non-availability of space at 400kV KVTPL, Vikroli ss. 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. However, no written submission received from KVTPL. -

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.

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

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.

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

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

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

4.81 220 kV GIS Upgradation at Salsette

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

4.82 Installation of 220/33 kV Station at Vile Parle

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.

4.83 2nd feed Chandivali (220 kV Aarey-Chandivali Link)

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.

4.84 220 kV Khardanda Scheme

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

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

5. Any other points raised by committee members with permission of Chair.

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Agenda Point No. 86:

Replacement of 2x100 MVA, 220/132kV ICTs by 2x200 MVA, 220/132kV ICTs at 220kV Alephata Sub-Station under EHV O&M Division, Manchar

After detailed deliberation and discussion, the committee recommended the said proposals of “Replacement of 2x100 MVA, 220/132kV ICTs by 2x200 MVA, 220/132kV ICTs at 220kV Alephata Sub-Station under EHV O&M Division, Manchar” for submission to GCC for approval.

Agenda Point No. 87:

Providing additional 1X50 MVA 220/33kV T/F alongwith HV & LV bays at 220 kV Badnera S/S under EHV O&M Division Amravati

After detailed deliberation and discussion, the committee recommended the said proposals of “Providing additional 1X50 MVA 220/33kV T/F alongwith HV & LV bays at 220 kV Badnera S/S under EHV O&M Division Amravati” for submission to GCC for approval.

Agenda point no. 88:

Providing additional 1X25 MVA 132/33kV T/F alongwith HV & LV bays at 132kV Digras S/s under EHV O&M Division Yavatmal

After detailed deliberation and discussion by members, the committee recommended the above proposal of “Providing additional 1X25 MVA 132/33kV T/F alongwith HV & LV bays at 132kV Digras S/s under EHV O&M Division Yavatmal” for submission to GCC for approval.

Agenda Point No. 89:

Replacement of 2x25 MVA,132/33kV power transformers with 2x50MVA, 132/33kV power transformers’ at 132kV Pandharkawada S/Stn under EHV O&M Division, Yavatmal

After detailed deliberation and discussion, the committee recommended the above proposal of “Replacement of 2x25 MVA,132/33kV power transformers with 2x50MVA, 132/33kV power transformers’ at 132kV Pandharkawada S/Stn under EHV O&M Division, Yavatmal” for submission to GCC for approval.

Agenda Point No. 90:

Providing additional 1X25 MVA 132/33kV T/F alongwith HV & LV bays at 132kV Karanja S/s under EHV O&M Division Akola

After detailed deliberation and discussion, the committee recommended the above proposal of “Providing additional 1X25 MVA 132/33kV T/F alongwith HV & LV bays at 132kV Karanja S/s under EHV O&M Division Akola” for submission to GCC for approval.

Agenda Point No. 91:

Providing additional 1X50 MVA 132/33kV T/F alongwith HV & LV bays at 132kV Malegaon S/s under EHV O&M Division Akola

After detailed deliberation and discussion, the committee recommended the above proposal of “Providing additional 1X50 MVA 132/33kV T/F alongwith HV & LV bays at 132kV Malegaon S/s under EHV O&M Division Akola” for submission to GCC for approval.

Agenda Point No. 92:

Providing additional 1X25 MVA 132/33kV T/F alongwith HV & LV bays at 132kV Mangrulpir S/s under EHV O&M Division Akola

After detailed deliberation and discussion, the committee recommended the above proposal of “Providing additional 1X25 MVA 132/33kV T/F alongwith HV & LV bays at 132kV Mangrulpir S/s under EHV O&M Division Akola” for submission to GCC for approval.

Agenda Point No. 93:

Replacement of 2X25 MVA, 132/33kV T/Fs by 2X50MVA, 132/33kV T/Fs alongwith HV & LV bays at 132kV Dusarbid S/S under EHV O&M Division Buldhana

After detailed deliberation and discussion, the committee recommended the above proposal of “Replacement of 2X25 MVA, 132/33kV T/Fs by 2X50MVA, 132/33kV T/Fs alongwith HV & LV bays at 132kV Dusarbid S/S under EHV O&M Division Buldhana” for submission to GCC for approval.

Agenda Point No. 94

Providing additional 1X25 MVA 132/33kV T/F alongwith HV & LV bays at 132kV Buldhana S/s under EHV O&M Division Buldhana

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

Agenda Point No. 95:

Providing additional 1X50MVA 132/33kV T/F alongwith HV & LV bays at 132kV Khamgaon S/s under EHV O&M Division Buldhana

After detailed deliberation and discussion, the committee recommended the above scheme of “Providing additional 1X50MVA 132/33kV T/F alongwith HV & LV bays at 132kV Khamgaon S/s under EHV O&M Division Buldhana” for submission to GCC for approval.

Agenda Point No. 96:

Providing additional 1X50 MVA 220/33kV T/F alongwith HV & LV bays at 220kV Chikhali S/s under EHV O&M Division Buldhana

Sub: Submission of Agenda points for 9th Grid Coordination Committee (GCC) Meeting.

After detailed deliberation and discussion, the committee recommended the above Scheme for “Providing additional 1X50 MVA 220/33kV T/F alongwith HV & LV bays at 220kV Chikhali S/s under EHV O&M Division Buldhana” for submission to GCC for approval.

Agenda Point No. 97:

Providing additional 1X50 MVA 132/33kV T/F alongwith HV & LV bays at 132kV Mehkar S/s under EHV O&M Division Buldhana

After detailed deliberation and discussion, the committee recommended the above proposal of “Providing additional 1X50 MVA 132/33kV T/F alongwith HV & LV bays at 132kV Mehkar S/s under EHV O&M Division Buldhana” for submission to GCC for approval.

Agenda Point No. 98:

Replacement of existing 2X25 MVA, 220/33kV T/Fs by 2X50 MVA, 220/33kV T/Fs at 220 kV Dhamangaon S/s under EHV (O&M) Division Amravati

After detailed deliberation and discussion, the committee recommended the above proposal of “Replacement of existing 2X25 MVA, 220/33kV T/Fs by 2X50 MVA, 220/33kV T/Fs at 220 kV Dhamangaon S/s under EHV (O&M) Division Amravati” for submission to GCC for approval.

Agenda Point No. 99:

Replacement of existing 3X105 MVA, 400/220/33kV ICT by 3X167 MVA, 400/220/33kV ICT along with replacement of spare 1X105 MVA, 400/220/33kV ICT unit by 1X167 MVA, 400/220/33 kV ICT unit at 400/220/33kV ICT at 400kV Akola S/s under EHV PC (O&M) zone, Amravati

After detailed deliberation and discussion, the committee recommended the above proposal of “Replacement of existing 3X105 MVA, 400/220/33kV ICT by 3X167 MVA, 400/220/33kV ICT along with replacement of spare 1X105 MVA, 400/220/33kV ICT unit by 1X167 MVA, 400/220/33 kV ICT unit at 400/220/33kV ICT at 400kV Akola S/s under EHV PC (O&M) zone, Amravati” for submission to GCC for approval.

Agenda Point No. 100:

Providing additional 3X167 MVA 400/220/33kV ICT along with HV & LV bays at 400 kV Jejuri S/s under Pune Zone

After detailed deliberation and discussion, the committee recommended the above proposal of “Providing additional 3X167 MVA 400/220/33kV ICT along with HV & LV bays at 400 kV Jejuri S/s under Pune Zone”, for submission to GCC for approval.

Agenda Point No. 101:

Providing additional 1x50MVA, 220/33kV T/F along with HV & LV Bays at 220kV Jejuri S/s under EHV (O&M) Division, Baramati.

After detailed deliberation and discussion, the committee recommended the above proposal of “Providing additional 1x50MVA, 220/33kV T/F along with HV & LV Bays at 220kV Jejuri S/s under EHV (O&M) Division, Baramati” for submission to GCC for approval.

Agenda Point No. 102:

Providing additional 1X25MVA, 132/33kV T/F along with HV & LV Bays and shifting of 33kV PT-I bay at 132kV Someshwarnagar S/s under EHV (O&M) Division Baramati

After detailed deliberation and discussion, the committee recommended the above proposal of “Providing additional 1X25MVA, 132/33kV T/F along with HV & LV Bays and shifting of 33kV PT-I bay at 132kV Someshwarnagar S/s under EHV (O&M) Division Baramati” for submission to GCC for approval.

Agenda Point No. 103:

Providing additional 1X50 MVA, 132/33kV T/F along with bus extension and HV & LV Bays at 132kV Ranwad Sub-Station under EHV (O&M) Division, Nashik

After detailed deliberation and discussion, the committee recommended the above proposal of “Providing additional 1X50 MVA, 132/33kV T/F along with bus extension and HV & LV Bays at 132kV Ranwad Sub-Station under EHV (O&M) Division, Nashik” for submission to GCC for approval.

Agenda Point No. 104:

Providing additional 1X50 MVA, 132/33kV T/F along with HV & LV Bays at 132kV Shevgaon Sub-Station under EHV (O&M) Division, Babhaleshwar

After detailed deliberation and discussion, the committee recommended the above proposal of “Providing additional 1X50 MVA, 132/33kV T/F along with HV & LV Bays at 132kV Shevgaon Sub-Station under EHV (O&M) Division, Babhaleshwar” for submission to GCC for approval.

Agenda Point No. 105:

Providing additional 1X50 MVA, 132/33kV T/F along with HV & LV Bays at 132kV Wadzire Sub-Station under EHV (O&M) Division, Babhaleshwar.

After detailed deliberation and discussion, the committee recommended the above proposal of “Providing additional 1X50 MVA, 132/33kV T/F along with HV & LV Bays at 132kV Wadzire Sub-Station under EHV (O&M) Division, Babhaleshwar” for submission to GCC for approval.

Agenda Point No. 106:

Providing additional 1X50 MVA, 132/33kV T/F along with HV & LV Bays at 132kV Karjat Sub-Station under EHV (O&M) Division, Babhaleshwar.

After detailed deliberation and discussion, the committee recommended the said proposals of “Providing additional 1X50 MVA, 132/33kV T/F along with HV & LV Bays at 132kV Karjat Sub-Station under EHV (O&M) Division, Babhaleshwar” for submission to GCC for approval.

Agenda Point No. 107:

Replacement of existing 2x25MVA 132/33kV T/Fs by 2x50 MVA 132/33kV T/Fs at 132kV Chandwad Substation under EHV O&M Division, Nashik

After detailed deliberation and discussion, the committee recommended the said proposals of “Replacement of existing 2x25MVA 132/33kV T/Fs by 2x50 MVA 132/33kV T/Fs at 132kV Chandwad Substation under EHV O&M Division, Nashik” for submission to GCC for approval.

Agenda point no. 108:

Providing additional 2X50MVA, 220/22kV T/Fs along with HV & LV Bays, 12 Nos. of 22kV GIS Bays, 2 Nos. of PT GIS Bays, 1 No. of 22kV Bus sectionalizer GIS Bay, 1 No. of Bus PT and allied civil works at 220kV Century Enka S/s under Pune Zone

After detailed deliberation and discussion by members, the committee recommended the above proposal of “Providing additional 2X50MVA, 220/22kV T/Fs along with HV & LV Bays, 12 Nos. of 22kV GIS Bays, 2 Nos. of PT GIS Bays, 1 No. of 22kV Bus sectionalizer GIS Bay, 1 No. of Bus PT and allied civil works at 220kV Century Enka S/s under Pune Zone” for submission to GCC for approval.

Agenda Point No. 109:

Replacement of existing 80MVA, 220/132kV ICT by 100MVA, 220/132kV ICT at 220kV Hinganghat S/s under EHV O&M Division Nagpur

After detailed deliberation and discussion, the committee recommended the above proposal of “Replacement of existing 80MVA, 220/132kV ICT by 100MVA, 220/132kV ICT at 220kV Hinganghat S/s under EHV O&M Division Nagpur” for submission to GCC for approval.

Agenda Point No. 110:

Replacement of of existing 50MVA, 220/132kV ICT by 100MVA, 220/132kV ICT at 220kV Gadchiroli S/s under EHV O&M Division Ballarshah

Sub: Submission of Agenda points for 9th Grid Coordination Committee (GCC) Meeting.

After detailed deliberation and discussion, the committee recommended the above proposal of “Replacement of existing 50MVA, 220/132kV ICT by 100MVA, 220/132kV ICT at 220kV Gadchiroli S/s under EHV O&M Division Ballarshah”, for submission to GCC for approval.

Agenda Point No. 111:

Replacement of existing 2 X (200-100) MVA, 220/132 kV ICTs at 220kV Butibori S/s under EHV (O&M) Division Nagpur

After detailed deliberation and discussion, the committee recommended the above proposal of “Replacement of existing 2 X (200-100) MVA, 220/132 kV ICTs at 220kV Butibori S/s under EHV (O&M) Division Nagpur”, for submission to GCC for approval.

Agenda Point No. 112:

Addition of 1 X 25 MVA, 220/33 kV T/F along with HV and LV bays, conversion of 33kV bus into twin bus by 0.4 twin conductor and 33 kV Bus sectionaliser at 220 kV Umred S/s under EHV (O&M) Division Nagpur

After detailed deliberation and discussion, the committee recommended the above proposal of “Addition of 1 X 25 MVA, 220/33 kV T/F along with HV and LV bays, conversion of 33kV bus into twin bus by 0.4 twin conductor and 33 kV Bus sectionaliser at 220 kV Umred S/s under EHV (O&M) Division Nagpur”, for submission to GCC for approval.

Agenda Point No. 113:

Addition of 1 X 50 MVA, 132/33 kV T/F along with HV and LV bays and allied civil works at 132kV Mouda S/s under EHV (O&M) Division Nagpur

After detailed deliberation and discussion, the committee recommended the above proposal of “Addition of 1 X 50 MVA, 132/33 kV T/F along with HV and LV bays and allied civil works at 132kV Mouda S/s under EHV (O&M) Division Nagpur” for submission to GCC for approval.

Agenda Point No. 114:

Replacement of existing 2 X 25 MVA, 220/33 kV T/Fs by 2 X 50 MVA, 220/33 kV T/Fs at 220kV Kanhan S/s under EHV (O&M) Division Nagpur

After detailed deliberation and discussion, the committee recommended the above proposal of “Replacement of existing 2 X 25 MVA, 220/33 kV T/Fs by 2 X 50 MVA, 220/33 kV T/Fs at 220kV Kanhan S/s under EHV (O&M) Division Nagpur”, for submission to GCC for approval.

Agenda Point No. 115:

Additional 50MVA,132/33kV T/F alongwith HV & LV bays, conversion of 33kV bus into twin twin bus and 33 kV Bus sectionaliser at 132kV Saoner S/s under EHV O&M Division Nagpur.

After detailed deliberation and discussion, the committee recommended the above proposal of “Additional 50MVA,132/33kV T/F alongwith HV & LV bays, conversion of 33kV bus into twin twin bus and 33 kV Bus sectionaliser at 132kV Saoner S/s under EHV O&M Division Nagpur”, for submission to GCC for approval.

Agenda Point No. 116:

Replacement of existing 2X25MVA, 132/33kV T/Fs by 2X50MVA, 132/33kV T/Fs at 132kV Seloo S/s under EHV O&M Division Wardha

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

Agenda Point No. 117:

Replacement of old existing 0.4 ACSR conductor by High Performance Conductor (HPC) along with suitable hardware, accessories for 220 kV Chinchwad-2-Chakan Line and 220 kV Bhosari 1-Chakan Line along with strengthening of bays at 220 kV Chinchwad-2, 400 kV Chakan and 220 kV Bhosari-I S/Stn by replacement of 0.4ACSR single conductor by HPC & allied equipment, hardware under EHV O&M Division, Pimpri Chinchwad, Pune.

After detailed deliberation and discussion, the committee recommended the above proposal of “Replacement of old existing 0.4 ACSR conductor by High Performance Conductor (HPC) along with suitable hardware, accessories for 220 kV Chinchwad-2-Chakan Line and 220 kV Bhosari 1-Chakan Line along with strengthening of bays at 220 kV Chinchwad-2, 400 kV Chakan and 220 kV Bhosari-I S/Stn by replacement of 0.4ACSR single conductor by HPC & allied equipment, hardware under EHV O&M Division, Pimpri Chinchwad, Pune”, for submission to GCC for approval.

Agenda Point No. 118:

Replacement of existing twin conductor, insulators, all accessories & hardwares by High Ampacity twin HPC conductor equivalent to 0.5 Moose conductor along with insulators & suitable hardwares & accessories of 400 kV Talegaon (PG) to Chakan line (17.8km) along with associated bay strengthening work at 400 kV Chakan R.S. under Pune Zone

After detailed deliberation and discussion, the committee recommended the above proposal of “Replacement of existing twin conductor, insulators, all accessories & hardwares by High Ampacity twin HPC conductor equivalent to 0.5 Moose conductor along with insulators & suitable hardwares

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& accessories of 400 kV Talegaon (PG) to Chakan line (17.8km) along with associated bay strengthening work at 400 kV Chakan R.S. under Pune Zone”, for submission to GCC for approval.

Agenda Point No. 119:

Accord of Administrative Approval for the scheme of Second Circuit Stringing on a) 132kV Mandrup – Karajgi, b) 132kV Akkalkot – Karajgi, c) 132kV Jeur-Parewadi d) 220 kV Lamboti-Vairag SCDC lines along with construction of associated end bays under Pune zone

After detailed deliberation and discussion, the committee recommended the above proposal of “Accord of Administrative Approval for the scheme of Second Circuit Stringing on a) 132kV Mandrup – Karajgi, b) 132kV Akkalkot – Karajgi, c) 132kV Jeur-Parewadi d) 220 kV Lamboti-Vairag SCDC lines along with construction of associated end bays under Pune zone”, for submission to GCC for approval.

Agenda Point No. 120:

Replacement of old existing 0.4 deer ACSR conductor by equivalent CCC HTLS conductor along with suitable hardware, accessories, porcelain long rod insulator and equipment for 220kV GCR (Eklahare) - Babhleshwar Ckt-1 (Line length -83.57km) & Ckt-2 (Line length - 83.57km) along with end bay work at 220kV GCR SS & 400kV Babhleshwar SS under EHV PC O & M Zone, Nashik

After detailed deliberation and discussion, the committee recommended the above proposal of “Replacement of old existing 0.4 deer ACSR conductor by equivalent CCC HTLS conductor along with suitable hardware, accessories, porcelain long rod insulator and equipment for 220kV GCR (Eklahare) - Babhleshwar Ckt-1 (Line length -83.57km) & Ckt-2 (Line length -83.57km) along with end bay work at 220kV GCR SS & 400kV Babhleshwar SS under EHV PC O & M Zone, Nashik”, for submission to GCC for approval.

Agenda Point No. 121:

Scheme of replacement of old existing 0.4 ACSR conductor by High Performance Conductor (CCC type HTLS conductor) along with suitable hardware, accessories of 220kV Bhosari-I-Bhosari-II, 220kV Bhosari-II-Telco, 220kV Bhosari-I- Century Enka, 220kV Century Enka-Khadki, 220kV Khadki-VSNL, 220kV VSNL-Lonikand-II & 220kV Bhosari-I-Lonikand-II lines along with strengthening of bays at respective substation & allied equipment, hardware under EHV O&M Circle, Pune.

After detailed deliberation and discussion, the committee recommended the above Scheme of “replacement of old existing 0.4 ACSR conductor by High Performance Conductor (CCC type HTLS

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conductor) along with suitable hardware, accessories of 220kV Bhosari-I- Bhosari-II, 220kV Bhosari-II-Telco, 220kV Bhosari-I- Century Enka, 220kV Century Enka-Khadki, 220kV Khadki-VSNL, 220kV VSNL-Lonikand-II & 220kV Bhosari-I-Lonikand-II lines along with strengthening of bays at respective substation & allied equipment, hardware under EHV O&M Circle, Pune”, for submission to GCC for approval.

Agenda Point No. 122:

Scheme for:

- 1) Work of replacement of existing 0.4 ACSR Conductor by equivalent High-Performance conductor of 220KV Kalwa-Colorchem, 220kv Kalwa-Temghar & 220kv Colorchem-Temghar Line under EHV O&M Division Kalwa under EHV O&M Circle Kalwa.**
- 2) Bay strengthening work of 220Kv Temghar - Kalwa, 220KV Temghar – Colourchem line and 220kV Kalwa- Temghar bays at 220/22 kv Temghar substation, 220kV Colorchem Substation, 400kV Kalwa Substation and 220kV Kalwa Substation under EHV O&M Circle Kalwa.**

After detailed deliberation and discussion, the committee recommended the above proposal of “Scheme for: 1) Work of replacement of existing 0.4 ACSR Conductor by equivalent High-Performance conductor of 220KV Kalwa-Colorchem, 220kv Kalwa-Temghar & 220kv Colorchem-Temghar Line under EHV O&M Division Kalwa under EHV O&M Circle Kalwa. 2) Bay strengthening work of 220Kv Temghar - Kalwa, 220KV Temghar – Colourchem line and 220kV Kalwa- Temghar bays at 220/22 kv Temghar substation, 220kV Colorchem Substation, 400kV Kalwa Substation and 220kV Kalwa Substation under EHV O&M Circle Kalwa”, for submission to GCC for approval.

Agenda Point No. 123:

Establishment of 132/33kV Ajani bk S/s Ta. Shirur Anantpal, Dist. Latur

After detailed deliberation and discussion, the committee recommended the above proposal of “Establishment of 132/33kV Ajani bk S/s Ta. Shirur Anantpal, Dist. Latur”, for submission to GCC for approval.

Agenda Point No. 124:

Establishment of 132/33 kV Bazargaon S/s Dist-Nagpur

After detailed deliberation and discussion, the committee recommended the above proposal of “Establishment of 132/33 kV Bazargaon S/s Dist-Nagpur”, for submission to GCC for approval.

Agenda Point No. 125:

Establishment of 132 /33 kV Pimpalner S/s, Taluka-Sakri. Dist-Dhule

After detailed deliberation and discussion, the committee recommended the above proposal of “Establishment of 132 /33 kV Pimpalner S/s, Taluka-Sakri. Dist-Dhule”, for submission to GCC for approval.

Agenda Point No. 126:

Establishment of 132 /33 kV Deori S/s, Dist- Gondia

After detailed deliberation and discussion, the committee recommended the above proposal of “Establishment of 132 /33 kV Deori S/s, Dist- Gondia”, for submission to GCC for approval.

Agenda Point No. 127:

Establishment of 132kv level at 220/33kV Insuli S/s

After detailed deliberation and discussion, the committee recommended the above proposal of “Establishment of 132kv level at 220/33kV Insuli S/s”, for submission to GCC

Agenda Point No. 128:

Establishment of 220/132 /33 KV Waghdari S/s,Ta. Akkalkot,Dist. Solapur

After detailed deliberation and discussion, the committee recommended the above proposal of “Establishment of 220/132 /33 KV Waghdari S/s,Ta. Akkalkot,Dist. Solapur”, for submission to GCC

Agenda Point No. 129:

Conversion of 132kV SCSC Sangamner – Babhaleshwar line into DCDC line in same corridor Tal- Sangamner/Akole , Dist-Ahmednagar by using ERS

After detailed deliberation and discussion, the committee recommended the above proposal of “Conversion of 132kV SCSC Sangamner – Babhaleshwar line into DCDC line in same corridor Tal- Sangamner/Akole , Dist-Ahmednagar by using ERS”, for submission to GCC

Agenda Point No. 130:

Establishment of 220/132 kV Igatpuri Substation by up-gradation of existing 132 kV Igatpuri Substation, Dist. Nashik

Sub: Submission of Agenda points for 9th Grid Coordination Committee (GCC) Meeting.

After detailed deliberation and discussion, the committee recommended the above proposal of “Establishment of 220/132 kV Igatpuri Substation by up-gradation of existing 132 kV Igatpuri Substation, Dist. Nashik”, for submission to GCC

Agenda Point No. 131:

Establishment of 132/33 kV Shiradwad S/s

After detailed deliberation and discussion, the committee recommended the above proposal of “Establishment of 132/33 kV Shiradwad S/s”, for submission to GCC

Agenda Point No. 132:

Establishment of 132/33 kV Kurkheda S/s ,Ta. Kurkheda, dist. Gadchiroli

After detailed deliberation and discussion, the committee recommended the above proposal of “Establishment of 132/33 kV Kurkheda S/s ,Ta. Kurkheda, dist. Gadchiroli”, for submission to GCC

Agenda Point No. 133:

Establishment of 220/22 kV Kopri HDIL S/s

After detailed deliberation and discussion, the committee recommended the above proposal of “Establishment of 220/22 kV Kopri HDIL S/s”, for submission to GCC

Agenda Point No. 134:

Establishment of 220 kV Rajewali S/s (Smart Suraksha City).

After detailed deliberation and discussion, the committee recommended the above proposal of “Establishment of 220 kV Rajewali S/s (Smart Suraksha City)”, for submission to GCC

Agenda Point No. 135:

Level creation of 132 kv / addition of ICT at 220 /33 KV Patoda S/s , Ta. Patoda, Dist. Beed

After detailed deliberation and discussion, the committee recommended the above proposal of “Level creation of 132 kv / addition of ICT at 220 /33 KV Patoda S/s , Ta. Patoda, Dist. Beed”, for submission to GCC

Agenda Point No. 136:

Scheme for DSITC of SDC/ RTU for the visibility of 250 nos. of MSETCL sub stations to SLDC & ALDC

After detailed deliberation and discussion, the committee recommended the above proposal of “Scheme for DSITC of SDC/ RTU for the visibility of 250 nos. of MSETCL sub stations to SLDC & ALDC”, for submission to GCC for approval.

Agenda Point No. 137:

Enhancing Transmission network reliability by Loop in Loop out of 220 kV Kalwa Salsette 5 line at MSETCL Bhandup S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of “Enhancing Transmission network reliability by Loop in Loop out of 220 kV Kalwa Salsette 5 line at MSETCL Bhandup S/s”, for submission to GCC for approval.

Agenda Point No. 138:

Upgradation of existing 110 kV Khopoli Karanjade corridor by replacing existing conductor by higher capacity conductor along with Tower.

After detailed deliberation and discussion, the committee recommended the above proposal of “Upgradation of existing 110 kV Khopoli Karanjade corridor by replacing existing conductor by higher capacity conductor along with Tower”, for submission to GCC for approval.

Agenda Point No. 139:

Upgradation and augmentation of Transformation capacity at Dharavi S/s and Carnac S/s by installation of additional Transformers.

125 MVA, 110 kV/33 kV/22 kV Transformer (Dharavi)

125 MVA, 220 kV/33 kV/22 kV Transformer (Carnac)

After detailed deliberation and discussion, the committee recommended the above proposal of Upgradation and augmentation of Transformation capacity at Dharavi S/s and Carnac S/s by installation of additional Transformers:

125 MVA, 110 kV/33 kV/22 kV Transformer (Dharavi)

125 MVA, 220 kV/33 kV/22 kV Transformer (Carnac)

for submission to GCC for approval.

Agenda Point No. 140:

Source Augmentation of 110 kV Mankhurd S/s with construction of additional 110 kV Tombay Mankhurd line by utilizing existing corridor.

After detailed deliberation and discussion, the committee recommended the above proposal of “Source Augmentation of 110 kV Mankhurd S/s with construction of additional 110 kV Tombay Mankhurd line by utilizing existing corridor” for submission to GCC for approval.

Agenda Point No. 141:

Augmentation and strengthening of 110 kV Bhira Khopoli Corridor by construction of additional 110 kV Bhira Khopoli Line.

After detailed deliberation and discussion, the committee recommended the above proposal of “Augmentation and strengthening of 110 kV Bhira Khopoli Corridor by construction of additional 110 kV Bhira Khopoli Line”, for submission to GCC for approval.

Agenda Point No. 142:

220 kV Borivali-Ghodbunder –Boisar LILO Line Augmentation.

After detailed deliberation and discussion, the committee recommended the above proposal of “220 kV Borivali-Ghodbunder –Boisar LILO Line Augmentation”, for submission to GCC for approval.

Points for discussion:

1. 10 Year Projected STU Plan- (FY 2024-25 to FY 2033-34- Maharashtra State)

In view of the Compliance to Electricity Act, Regulations the, State Transmission Utility (STU) has prepared the Short term(3 years), Medium Term(5 years) and long term (10 years) Transmission Plan for MSETCL and Mumbai (2024-25 to 2033-34)

2. MOU for O&M of 2 Nos. 400 kV Kharghar Bays of KVTPL.

For Routine O&M, of KVTPL constructed 2 Nos. 400 kV Bays at Kharghar, KVTPL has proposed @ 1% of the bay capital cost with 0% escalation every year.



**Presentation by
State Load Despatch Centre, Maharashtra
9th GCC Meeting**

11th July 2024



2.1a Maharashtra System Demand Scenario for the month from Dec 2023 to June 2024

A - State Demand Details

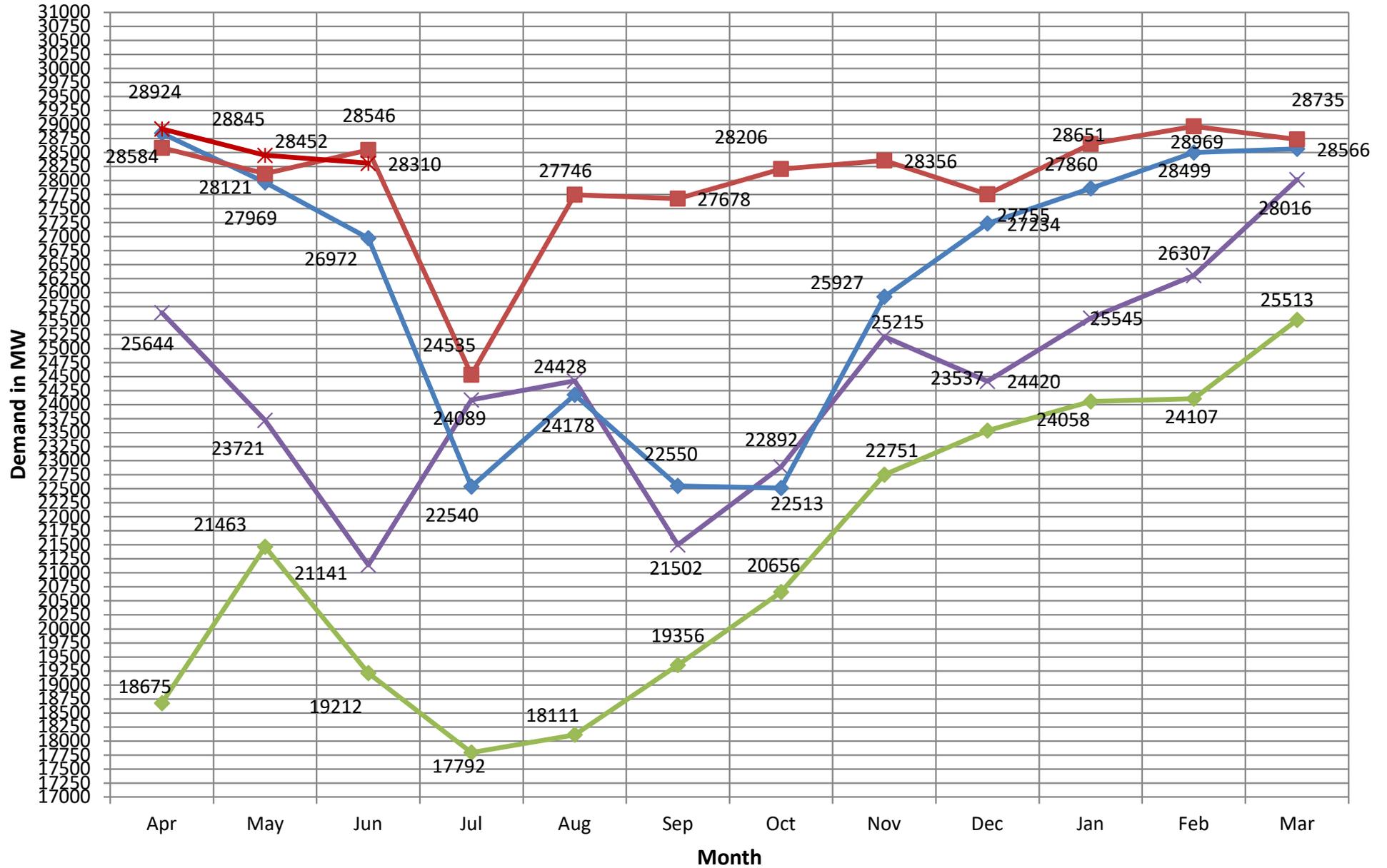
Month	Peak Demand (MW)	Catered Demand (MW)	Load Shedding /Shortfall (MW)	Date	Time (Hrs)		Min. Demand (MW)	Date	Time(Hrs)
Dec-23	27755	27755	0	27.12.2023	11:00		12247	01.12.2023	04:00
Jan-24	28651	28651	0	29.01.2024	11:00		18473	27.01.2024	03:00
Feb-24	28969	28969	0	07.02.2024	11:00		20701	03.02.2024	03:00
Mar-24	28735	28735	0	28.03.2024	12:00		21363	04.03.2024	03:00
Apr-24	28924	28924	0	29.04.2024	16:00		21998	13.04.2024	05:00
May-24	28452	28452	0	06.05.2024	16:00		21913	01.05.2024	19:00
June-24	28310	28310	0	03.06.2024	16:00		18616	10.06.2024	04:00

Maximum State peak demand catered till date – 28969 MW on 07th February 2024.

B - Mumbai Demand Details (including open access)

Months	Peak Demand (MW)	Catered Demand (MW)	Load Shedding /Shortfall (MW)	Date	Time (Hrs)		Min. Demand (MW)	Date	Time(Hrs)
Dec-23	3297	3297	0	04.12.2023	12:00		1766	25.12.2023	04:00
Jan-24	3272	3272	0	12.01.2024	12:00		1479	24.01.2024	04:00
Feb-24	3285	3285	0	29.02.2024	12:00		1593	02.02.2024	04:00
Mar-24	3550	3550	0	28.03.2024	12:00		1668	06.03.2024	04:00
Apr-24	4042	4042	0	16.04.2024	16:00		2150	06.04.2024	05:00
May-24	4306	4306	0	21.05.2024	16:00		2333	14.05.2024	06:00
June-24	4248	4248	0	06.06.2024	16:00		2216	28.06.2024	05:00

Monthly Maharashtra State Max Demand For the FY 20-21, FY 21-22, FY 22-23, FY 23-24 and FY 24-25



◆ FY 20-21
 × FY 2021-22
 ◆ FY 2022-23
 ■ FY 2023-24
 ✱ FY 2024-25

2.1C - Energy Catered in MUs

Particulars		Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	June-24
State	Monthly	16471	17515	17169	18804	18519	18809	16587
	Max.	565	588	611	644	648	640	632
	Avg. Per Day	531	565	592	606	617	607	553
Mumbai	Monthly	1858	1743	1698	1943	2182	2399	2242
	Max.	66	65	65	71	82	86	86
	Avg. Per Day	60	56	59	63	73	77	75

Maximum Energy catered till date - 648 MUs on 30th April 2024.

2.2 - Frequency profile for the months from Dec-2023 – June-2024

Range IEGC band:	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	June-24
	% time						
> 50.05 Hz	16.679	16.891	19.574	16.219	15.074	17.124	15.968
49.9 - 50.05 Hz	75.204	76.201	74.025	77.756	77.352	80.336	79.400
< 49.9 Hz	8.117	6.908	6.401	6.025	7.574	2.54	4.632

2.3 - UFR Operation for the months from Dec- 2023 – June-2024

Month	Date	Total MW
Dec-23		NIL
Jan-24		
Feb-24		
Mar-24		
Apr-24		
May-24		
June-24		

2.4 - Voltage Profile for the months from Dec-23 – June-24

Range	Voltage level	Dec-23		Jan-24		Feb-24		Mar-24		Apr-24		May-24		June-24	
		Max	765kV	AKOLA	795	EKTUNI	792	EKTUNI AKOLA	788	EKTUNI	791	EKTUNI	791	EKTUNI	798
400kV	KALWA		437	KALWA	438	KALWA	436	KALWA NEW KOYNA	433	KALWA	438	KALWA	432	NEW KOYNA	433
Min	765kV	AKOLA	736	KORADI - III	754	EKTUNI	746	EKTUNI	707	EKTUNI	746	EKTUNI	744	AKOLA	757
	400kV	LONIKAND -II	379	LONIKAND - I & II	377	CHAKAN	373	JEJURI	375	LONIKAND -I	371	JEJURI	372	LONIKAND -I	372

2.5 - Generating Units under Prolonged outage

Utility	Name of Unit	Capacity	Date Trip	Time Trip	Date Sync	Time Sync	Reason	Expected date of revival
CS	Tarapur 1	160	08-01-20	10:37	-	Continued.	Refueling. While refueling preparation, some repair works identified which are being executed before refueling.	30.12.24
CS	Tarapur 2	160	13-07-20	4:38	-	Continued.	For cleaning of clogged basket strainer of cooling water system due to heavy ingress of debris from sea. The outage extended for repair and re-fueling.	30.11.24
MSPGCL	Uran Unit A0	120	07-09-22	16:30	-	Continued.	Turbine tripped on high vibrations.	31.08.24
MSPGCL	Ghatghar U-2	125	26.05.24	13:17	-	Continued.	Stator Earth Fault	26.07.24
MSPGCL	Koyna Unit 5	80	02-07-24	11:00	-	Continued.	PLC upgradation work	27-07-2024
MSPGCL	Bhusawal Unit 4	500	16-06-24	00:00	-	Continued.	Annual Overhaul	11-07-2024
MSPGCL	Paras Unit 3	250	30-06-24	22:35	-	Continued.	Annual Overhaul	14-08-2024
IPP	RPL(AMT) U-1	270	01-07-24	07:00	-	Continued.	Annual Overhaul	01-08-2024
MSPGCL	Koyna Unit 3	70	09-07-24	11:00	-	Continued.	Governor replacement work.	07-08-2024

2.6 – Failed Reactor Status

Sr. No	Name of the Line Reactors	MVAR	Date of failure	In/Out	STATUS as on 30.06.2024
1	400kV Dhule S/S-SSP-1 (CSR)	50	23.12.2016	OUT OF SERVICE (faulty)	Work is held up due to no response from M/s BHEL.
2	400kV Dhule S/S-SSP-2 (CSR)	50	27.05.2017	OUT OF SERVICE (faulty)	
3	400kV Karad – Lonikand (CSR)	80	14.09.2017	OUT OF SERVICE (faulty)	Work is held up due to no response from M/s BHEL.
4	400kV Babbleshwar Bus Reactor	80	26.06.2019	OUT OF SERVICE (faulty)	Reactor is taken out and 125 MVAR reactor is being commissioned.
5	400kV Khadka Bus Reactor	50	10.11.2018	OUT OF SERVICE (faulty)	Due to non finalization of Tender Project wing recently handed over the scheme to O&M Wing. Scheme is to be revised.
6	400kV Kharghar Bus Reactor	80	04.06.2020	OUT OF SERVICE (faulty)	Turret CT & Bushing Testing work is done & Erection activity including erection of turret CTs, Bushing & filtration / vacuum is in progress.
7	400kV Nagothane Bus Reactor	80	23.11.2021	OUT OF SERVICE (faulty)	The proposal is returned on 05.04.2023 to field office for compliance, the same is awaited from field office.
8	400kV Kalwa Bus Reactor	125	10.03.2024	OUT OF SERVICE (faulty)	New 125 MVAR BHEL make Reactor allotted from 400kV Babhaleshwar SS received & erection work is completed at 400kV Kalwa SS. Vacuum cycle is in progress and expected to be commissioned in July 2024.
9	400kV Deepnagar	125	H/T on 21.06.2024 at 19.49 hrs.	Rising trend of Acetylene (C ₂ H ₂)	Due to continuous rising trend of Acetylene (C ₂ H ₂) in 400KV, 125MVAR BUS SHUNT Reactor installed at 400KV RS Deepnagar, Bhusawal-II, it is recommended by SE, PAC Circle, Nashik, to not keep the said reactor in service.

3.1 Status of New Reactors

Sr. No.	Name of the Line Reactors	MVAr	Work Completion By	STATUS
1	400 kV Thaptitanda	125	Sep-24	Reactor (CGL make) received at 400kV Thaptitanda SS along with accessories & oil on 13.01.2024. 400kV Isolators received at site, CT, LA & Panels are balance for supply.
2	400 kV Girwali	125	Sep-24	Existing Reactor is dismantled in Dec 23 & Reactor plinth work is in progress.
3	400 kV Waluj	125		Under tendering at C.O.Project
4	400 kV Chandrapur	125	Dec-24	Revised scheme is sanctioned excluding Jejuri Reactor vide BR No.167/46 dtd.04.03.2024. Indent submitted to CPA for procurement & scheme conveyed to field for ETC tender.
5	400 kV Khadka	125		Due to low response & higher rate tender cancellation note is put up by Project Department
6	400 kV Babhaleshwar	2 x 125	June 24	01 No of Reactor is supplied at site on 16.10.2023 and 2nd on 13.12.2023, but transported to 400kV Kalwa SS due to reactor failure at Kalwa SS. 1 st reactor expected to be commissioned by 30.06.2024
7	400 kV Lonikand-I	125	Dec-24	Revised scheme is sanctioned excluding Jejuri Reactor vide BR No.167/46 dtd.04.03.2024. Indent submitted to CPA for procurement & scheme conveyed to field for ETC tender.
8	400 kV Jejuri	125		
9	400 kV Chakan	125		
10	400 kV Kalwa	125	June 24	Reactor commissioned on 10.03.2024 but failed due to R ph. Bushing burst on dt. 10.03.2024 at 19:07. Failed reactor is transported to M/s BHEL, Joint inspection is done at BHEL Factory. No sign of major damage to windings & core. New 125 MVAR BHEL make Reactor allotted from 400kV Babhaleshwar SS received at 400kV Kalwa SS. Work in progress and expected to be commissioned by 27.06.2024.
11	400 kV Kudus	125		Due to low response & higher rate tender cancellation note is put up by Project Department

2.7 Outages Aailed Abstract from Dec-2023 to June-2024

Month	Total nos. of outages approved			Total nos. of outages aailed			% of Aailed outages	Total nos. of outages Deferred			% of Deferred outages
	OCCM	Addl. OCCM	Post OCCM	OCCM	Addl. OCCM	Post OCCM		WRLDC	Site	MSLDC	
Dec-23	898	0	9	121	0	7	14	57	612	110	86
Jan-24	752	0	9	110	0	7	15.37	34	552	58	84.63
Feb-24	631	0	8	84	0	4	13.77	38	424	89	86.23
Mar-24	681	0	12	125	0	4	18.61	26	423	115	81.39
Apr-24	824	0	10	124	0	10	16.07	22	547	131	81.39
May-24	852	0	126	46	0	52	10.02	2	782	96	89.98
June-24	821	0	45	108	0	2	12.7	25	654	77	87.3

2.8 - Koyna Lake Level in Ft.

Month	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	June-24
At the end of the month	2141.3	2132.4	2123.7	2110.2	2087	2048.8	2055
Corresponding Figure of the month Last Year	2149.6	2140.9	2128.3	2114.5	2092.2	2049.2	2034.8

2.9 - New Network Addition during Dec-2023 to June-24

Sr. No.	Name of substation	Lines Details	Synch. Date
1	220 kV Print House	220/22kV 90MVA T/F-I charged at 19:35 Hrs	20.12.2023
2	220 kV Print House	220/22kV 90MVA T/F-II charged at 20:01 Hrs	20.12.2023
3	132 kV Kinwat	At 132 kV Kinwat s/s Himayatnagar Bay & Kinwat Himayatnagar ckt charged on no load at 15:10 Hrs	23.12.2023
4	132 kV Ida	132kV LILO (Tap) on 132kV Bhoom -Paranda line for 132/33kV Ida Substation charged successfully at 19.42 hrs and stood ok. 132kV Bhoom Line bay at 132/33kV Ida ss is charged successfully at 20.14 hrs and stood ok. 132kV Aayan bay at 132/33 kV Ida ss charged successfully at 20.21 hrs	29.12.2023
5	132 kV Shirpur	132 kV End bay of Velapur charged at 17:44 Hrs	30.12.2023
6	132 kV Purandwade	132 kV End bay of Walchandnagar charged at 17:44 Hrs	30.12.2023
7	400kV Babhaleshwar	400/220kV ICT 5 charged at 17:48 hrs	28.02.2024
8	132 KV Umarched	At 132 KV Umarched S/s, New 25 MVA, 132/33 KV power Transformer is charged at 20:40 Hrs	29.02.2024
9	110 kV M/s Athani Sugar	110 kV Kale (T) Line Bay charged at 20:05 Hrs	01.03.2024
10	110 kV M/s Athani Sugar	110 kV Bambarwadi Line Bay charged at 20:08 Hrs	01.03.2024
11	110 kV M/s Athani Sugar	132/11 kV 16MVA T/F charged at 16:37 Hrs	02.03.2024
12	110 kV M/s Athani Sugar	11 kV , 16 MW Cogeneration synchronized at 17:17 Hrs	02.03.2024
13	132 kV Pandharkawada S/s	132 kV Pandharkawada - Mukutban TSS line charged at 00:18 Hrs	03.03.2024

2.9 - New Network Addition during Dec-2023 – June-24

Sr. No.	Name of substation	Lines Details	Synch. Date
14	132 kV Samudral S/s	132 kV Samudral S/s charged by making LILO on 132kV Omerga-Narangwadi Ckt-I tap arrangement at 15:50 Hrs	07.03.2024
15	132 kV Samudral S/s	M/s Quineregy Industries Ltd. 32 MW Co-Generation charged at 20:50 Hrs	07.03.2024
16	400 kV Kalwa RS	125 MVAR Bus reactor charged at 17:12 Hrs However, the reactor tripped on the same day due to R phase bushing burst.	10.03.2024
17	220 kV Jalkot S/s	132 kV Jalkot - M/s Sri Maruti wind park (Vaspeth) line charged at 17:55 Hrs	11.03.2024
18	110 kV Salgare TSS	110 kV Kavathemahankal S/s to Salgare TSS SCDC line & 110 kV Metering bay charged at 19:13 Hrs	13.03.2024
19	220 kV Karanja S/s	2 Nos of 33 kV Bays of M/s Swami Samarth Solar Green Energy LLP charged at 14:18 & 14:19 respectively.	14.03.2024
20	220 kV Narangwadi S/s	33 kV Bay of M/s Kalpa Solar alongwith line charged at 16:50 Hrs	14.03.2024
21	220 kV Bhandup S/s	Spare bay charged at 18:12 Hrs	14.03.2024
22	220 kV Kharghar S/s	50 MVA, 220/33 kV , T/F -4 charged at 15:40 Hrs	15.03.2024
23	220 kV Bhaveghar S/s	220 kV Bhaveghar- Inox line charged at 03:01 Hrs	16.03.2024
24	220 kV Inox S/s	220 kV Inox S/s charged on 220kV Bhevagher-Wada line by LILO arrangement at 02:30 Hrs	16.03.2024
25	220 kV Inox S/s	220/6.6 kV , 15 MVA T/F charged at 01:00 Hrs	17.03.2024
26	400 kV Kumbhargaon S/s	At 400 kV Kumbhargaon S/s 220 kV Kumbhargaon- Kurunda Ckt- I & II alongwith end bays charged at 14:48 Hrs	20.03.2024

2.9 - New Network Addition during Dec-2023 – June-24

Sr. No.	Name of substation	Lines Details	Synch. Date
27	132 kV Chikhalthana	132 kV Hybrid Pass charged at 13:55 Hrs	03.04.2024
28	132 kV Khapri	132/33 kV, 25 MVA transformer charged at 14:19 Hrs	04.04.2024
29	220 kV Akola	132/ 33 kV, 50 MVA transformer charged at 18:40 Hrs	05.04.2024
30	220 kV Pirangut	220/22 kV , 50 MVA transformer -1 charged at 18:35 Hrs	06.04.2024
31	400 kV Vikhroli	400 kV Vikhroli- Kalwa line (Bay-410) (Anti Theft) charged on no load at 14:51 Hrs	28.04.2024
32	400 kV Vikhroli	400 kV Vikhroli- Talegaon line (Bay-412) (Anti Theft) charged on no load at 15:27 Hrs	28.04.2024
33	220 kV Shivajinagar	25 MW Tata Power Solar project of Mahagenco 33 kV Feeder bay-1 charged at 16:05 Hrs	29.04.2024
34	220 kV Shivajinagar	25 MW Tata Power Solar project of Mahagenco 33 kV Feeder bay-2 charged at 16:06 Hrs	29.04.2024
35	220 kV Jambhul	220/22 kV 50 MVA PTR-I charged at 18:22 Hrs	02.05.2024
36	220 kV Patoda	220 kV Patoda s/stn 220kV Maruti wind park (100 MW) linealong with Bay charged at 18:50 Hrs, up to line isolator of M/S Maruti Wind park.	03.05.2024
37	132 kV Bambhulwadi	132 kV Bambhulwadi S/s charged by making LILO on 132kV Manmad chalisgaon line (with metering bay) & 132kV line from locn no 1 (2.782km) for 100MW Solar power park proposed by M/s Chordiya and Sons Builders & Land Developers Pvt. Limited at 03:30 Hrs.	07.05.2024
38	132 kV Bambhulwadi	50 MVA, 33/132 kV T/F- I charged at 13:07 Hrs	07.05.2024
39	132 kV Bambhulwadi	50 MVA, 33/132 kV T/F- II charged at 13:38 Hrs	07.05.2024
40	220 kV Palghar	100 MVA , 220/132 kV ICT- II charged at 21:04 Hrs	10.05.2024
41	220 kV Chitegaon	220 kV Hybrid Switchgear of Bus sectionaliser first time charged at 21:54 Hrs	24.05.2024

2.9 - New Network Addition during Dec-2023 –June-24

Sr. No.	Name of substation	Lines Details	Synch. Date
42	220 kV Tuljapur	33 kV TS wind (20MW) bay and line charged at 15:28 Hrs.	29.05.2024
43	220 kV Umred	2 X 33 kV WCL I & II AIS bays at 220KV Umred s/stn for M/S Western Coal Fields, MZ-Makardhokada, Tal-Umred, Dist. Nagpur under EHV (O&M) Division Nagpur charged at 18.56 Hrs.	29.05.2024
44	220 kV Chalisgaon	200MVA, 220/132 kV ICT-3 first time charged on No-load at 16.07hrs.	30.05.2024
45	132 kV SRJ Strip	132 kV SRJ Strip SS (Steel factory) charged at 19:12 Hrs LILO on 132 kV Jalna -SRJ PEETY line.	10.06.2024
46	132 kV Mantha	132 kV ADICCA Solar Bay (50 MW) alongwith line at 22:24 Hrs	21.06.2024
47	132 kV Kombhalne	33 kV Line bay charged at 16:09 Hrs for 20 MW Solar project of M/s Bhageria Industries Limited	22.06.2024
48	220 kV KVTL Vikhroli	250 MVA , 220/132 kV ICT-I charged at 20:04 Hrs	22.06.2024
49	220 kV Jamkhed	220 kV Jamkhed S/s charged on 220 kV Taptitanda Nagewadi Ckt-II with LILO arrangment at 22:29 Hrs	23.06.2024
50	132 kV Mohol	33kV Laxmihira Solar bay charged at 18:45 Hrs	25.06.2024
51	132 kV Procer Energy	132 kV Sonpeth to M/s Procer Energy 70 MW Solar park Ckt charged at 16:03 Hrs	26.06.2024
52	132 kV Gosekhurd	25 MVA, 132/33 kV T/F charged at 18:35 Hrs	26.06.2024
53	132 kV Procer Energy	Solar End Bay and 70 MVA T/F charged on humming at 17:52 Hrs	26.06.2024
54	110 kV Reliable Sugar and Distilleries	110 kV Reliable Sugar 110 kV Reliable Sugar and Distilleries S/s - 2 Nos of 110kV Line bay chaged at 20:35 Hrs (Through Tap LILO arrangment will be done after SCADA work completion. Proposed arrangment is LILO on 110kV Bidri- Dudhganga Line)	27.06.2024
55	220 kV Khandeshwar	220 kV Khandeshwar Timber Market Ckt-I charged at 18:23 Hrs	28.06.2024

2.9 - New Network Addition during Dec-2023 –June-24

Sr. No.	Name of substation	Lines Details	Synch. Date
56	220 kV Timber Market GIS (Panvel-II)	50 MVA, 220/33 kV T/F-I charged at 18:30 Hrs	28.06.2024
57	220 kV Khandeshwar	220 kV Khandeshwar Timber Market Ckt-II charged at 19:46 Hrs	28.06.2024
58	132 kV CTRLS	132kV CTRLS S/s charged on 132 kV Karanja - Talegaon Line with LILO arrangment at 02:52 Hrs	29.06.2024
59	132 kV ADICCA (ISMT)	50 MVA T/F at ADDICCA Solar Park charged at 20:46 Hrs	29.06.2024
60	220 kV Jamkhed	35 MVA , 220/33 kV T/F charged at 16:06 Hrs	29.06.2024
61	220 kV Jamkhed	50 MVA , 220/33 kV T/F charged at 16:16 Hrs	29.06.2024

3.0 - System Disturbance in Maharashtra Network for the period Dec 23 to June-24

SR. NO.	SUB-STATION	LINE/EQPT/ BUS AFFECTED	DATE OF TRIPPING	TIME (hrs)	Sync. Hrs.	EQUIP. FAILURE	LOAD/GEN AFFECTED (approx.)	REASONS OF FAILURE
1	220 kV Bapgaon	1) 220kV Kalwa 2) 220kV Ghatghar tripped at Ghatghar end only. 3) 50 MVA T/F1 4) 50 MVA T/F2	29.12.2023	14:55	1) 220kV Kalwa : 01:29 hrs of 30.12.2023 2) 220kV Ghatghar : 15:13 hrs 3) 50 MVA T/F1 : 15:16 hrs 4) 50 MVA T/F2 : 15:16 hrs	Nil	Nil	Wave Trap jumper snapped at 220 kV Kalwa s/s.
2	220 kV Chinchwad 1	All elements affected as there is single bus system.	07.01.2024	05:53	6:04	220 kV 'Y' Phase PT burst	88 MW	220 kV 'Y' Phase PT burst.
3	400 kV Parly	400 kV Main Bus-1 along with connected elements.	27.01.2024	12:27	14:25	Nil	Nil	While doing arrangements for stringing of 400kV Parli - Parli(M)- Ckt2 line gantry(PGCIL work), the Steel sling slipped from the pulley and it came to vicinity of dropper of bus-1 isolator then bus-1 was tripped.

3.0 - System Disturbance in Maharashtra Network for the period Dec-23 to June-24

SR. NO.	SUB-STATION	LINE/EQPT/ BUS AFFECTED	DATE OF TRIPPING	TIME (hrs)	Sync. Hrs.	EQUIP. FAILURE	LOAD/GEN AFFECTED (approx.)	REASONS OF FAILURE
4	400 kV Kharghar	220 kV Bus-1 alongwith 1) 220kV Ulwe-I line 2) 220kV khandeshwar-II 3) 220kV Sonkhar 4) 220kV Netmagic 5) 220/33kV 50MVA PTR-2 6) 220/33kV 50MVA PTR-3 7) 400/220kV 315MVA ICT-III 8) 220 kV Buscoupler	02.02.2024	13:25	17:30	220 kV Bus-1 'Y' Phase PT burst	26 MW	220 kV Bus-1 'Y' Phase PT burst
5	400 kV Talegaon PG - Lonikand -I & Talegaon PG- Chakan tripped simultaneously	400 kV Talegaon PG - Lonikand -I & Talegaon PG- Chakan	11.03.2024	10:31	11:45	NIL	773 MW (DLS+LTS)	Distance Protection

3.0 - System Disturbance in Maharashtra Network for the period Dec-23 to June-24

SR. NO.	SUB-STATION / LINE	LINE/EQPT/ BUS AFFECTED	DATE OF TRIPPING	TIME (hrs)	Sync. Hrs.	EQUIP. FAILURE	LOAD/GEN AFFECTED (approx.)	REASONS OF FAILURE
6	400kV Warora-Adani ckt-1	400kV Warora-Adani ckt-1	05.04.2024	13:14	19:05	NIL	446 MW	R-ph to earth fault in Zone-1
7	400 kV Lonikand-I	all the elements on 400kV Bus- A	08.04.2024	09:31	09:38	NIL	197.05 MW (DLS+LTS)	HV side LBB scheme checked & It is found that 86C relay not operated properly . & same is replaced with spare 86C relay
8	220 kV Tarapur – Borivali	220 kV Tarapur – Borivali line	17.04.2024	12:04	13:14	NIL	45 MW DLS	Overcurrent protection
9	220 kV Talandage Hamidwada	220 kV Talandage Hamidwada & at the same time 220 kV Belewadi - Mumewadi at Belewadi end only	23.04.2024	15:09	15:38	NIL	Load 111 MW & Generation -18 MW	Distance protection
10	765/400 kV APML Tiroda	400 kV Tiroda - Warora Ckt-II	23.04.2024	20:14	22:51	NIL	APML Generation-1800 MW	400 kV Bus-1 & 2 tripped
11	400KV Chandrapur-2	400kV Chandrapur-2-Nanded Ckt-1	22.04.2024	17:44	20:18	NIL	396 MW	Distance Protection
12	400 kV Talegaon PG S/s	400/220 kV ICT's 1 & 2	26.04.2024	13:49	14:33	NIL	500 MW DLS + 476 MW LTS	Main bus-2 operated

3.0 - System Disturbance in Maharashtra Network for the period Dec-23 to June-24

SR. NO.	SUB-STATION / LINE	LINE/EQPT/ BUS AFFECTED	DATE OF TRIPPING	TIME (hrs)	Sync. Hrs.	EQUIP. FAILURE	LOAD/GEN AFFECTED (approx.)	REASONS OF FAILURE
13	400 kV Kalwa	220 kV Bus with following elements 1.220 kV Kalwa DCHI line 2.220 kV Kalwa Tifil line 3.220 kV Kalwa Mulund line 4. 220 kV Kalwa Salette - III line 5.220 kV Kalwa Borivali line 6. 220 kV Interconnector at Kalwa 7. 400/220 kV 600 MVA ICT-I 8. 400/220 kV 500 MVA ICT-II	13.05.2024	15:46	16:26	NIL	35 MW (29 MW at 220 kV Pawne s/s & 6 MW of M/s NTT & Print House)	220 kV Bus 2 LBB operated due to DCHI line.
14	400 kV Kharghar	400/220 kV , 315 MVA ICT-2	13.05.2024	15:53	16:31	NIL	357 MW (LTS at Kharghar - 102 MW, AEML - 9 MW TPCL Load due to LTS - 246 MW, at Dharavi - 155 MW, Kalyan-71 MW, Ambernath- 12 MW & Chembur- 18 MW)	Oil Surge Relay Protection operated.
15	400 kV Jejuri	220 kV Bus - II with following elements 1.220kV Phursungi II 2. 220 kV Jejuri II 3. 220 kV Baramati 4. ICT II,III and following elements on Bus - I tripped 1.220 Phursungi-I 2.Lonand-I & 3.Kondhwa	20.05.2024	23:24	02:31	NIL	139 MW (220 kV Kondhwa-39 MW, 132 kV NCL-53 MW & Kothrud - 47 MW)	LBB protection operated.
16	220 kV Gorai (AFMI)	220kV Bus I & II with all bays	28.05.2024	17:59	20:30	NIL	99 MW	Bus bar protection operated.

3.0 - System Disturbance in Maharashtra Network for the period Dec-23 to June-24

SR. NO.	SUB-STATION / LINE	LINE/EQPT/ BUS AFFECTED	DATE OF TRIPPING	TIME (hrs)	Sync. Hrs.	EQUIP. FAILURE	LOAD/GEN AFFECTED (approx.)	REASONS OF FAILURE
17	220kV Nalasopara	220kV Padghe-Nalasopara line tripped at 06:03 hrs	09.06.2024	06:03		-	75 MW	At 06:03 hrs 220kV Nalasopara s/s went into dark as 220kV Padghe-Nalasopara line tripped at 06:03 hrs and planned outage on 220 kV Boisar PG-Panchali ckt availed at 05:46 hrs which feeds 220 kV Panchali-Nalasopara ckt. This resulted in 75 MW load loss in Nalasopara .
18	Tata Backbay 110kV	Tata Backbay 110kV Bus -1, 2 & all 33kV buses	15.06.2024	16:59	18:12		62 MW	At 1659 hrs on 15th June 2024, Tata Backbay 110kV Bus -1, 2 & all 33kV buses got shutdown due to operation of 110kV LBBU of 250 MVA Auto Transformer-1 & 2.
19	765 Akola II	765kV Akola II-Ektuni II	26-05-2024	18:11	12-06-2024	20:44		Tripped on distance protection.(Due to tower collapsed).
20	400kV Khaperkheda	220 KV NEW KHAPERKHEDA (400 KV)-220KV OLD KHAPERKHEDA CKT 2	16-06-2024	16:56	16-06-2024	18:17		Bus-1 Bus bar Protection operated

3.2 - Status of State Transmission Schemes

Sr. No.	Name of the Scheme	CoD	Status
1	400 kV Bableshwar -Kudus D/C (Quad)		Foundations - 689/719 Erection – 673/719 Stringing – 286/457 Ckt km.
2	400 kV D/C Jejuri-Hinjewadi Line (Jejuri Wainjhar) Package-1.	2024-25	Balance work tenderization is in progress.
3	400 kV D/C Jejuri-Hinjewadi Line (Jejuri Wainjhar) Package-2.		Balance work tenderization is in progress.
4	LILO on another Ckt. Of 400kV Bhusawal 2 - Aurangabad 1 for Thaptitanda.		50% work done approx. and for balance work LOA issued to new agency by C.O. Package 1 Foundations - 270/273 Erection - 244/273 Stringing - 126/176 Ckt km.

3.3 - Status of MMR and Mumbai Transmission Schemes

Sr. No	Name of the Scheme	CoD	Status
1	LILO of 220 kV Boisar – Ghodbunder & Tarapur – Borivali at Kudus. (Twin AAAC) - 10 km		Foundations: - 110/120 Erection: - 108/120 Stringing: - 22.8/31.5 km.



Thank
YOU

Annexure 1.1

Grid Events for the period from December 2023 till date

Sr No	Grid Event	Date of occurrence	Time Hrs.	Load affected MW	Details
1	Hand Tripping of 400kV Kalwa - Talegaon Line at 400 kV Kalwa S/s	06.06.2024	16:16	445 DLS	On 06.06.2024 around 16: 15 Hrs., heavy sparking was observed on B phase line isolator of 400 kV Kalwa - Talegaon line at 400 kV Kalwa S/s and accordingly the line was urgently hand tripped at 16:16 Hrs.
2	Bus Bar Protection operated at 220kV Gorai EHV station	28.05.2024	17:59	1587	At 17:59Hrs; due to Failure 125 MVA Tr 2 Bay Bus 1 isolator chamber of GIS Bus bar Protection operated at 220kV Gorai EHV station, which led to tripping of 220kV Gorai – Versova Line . 220kV Gorai – Ghodbundar Line, 220kV Gorai – MSETCL Borivali Line 1, 220kV Gorai – MSETCL Borivali Line 2, 125 MVA Tr 1 and 125 MVA Tr 2.
3	Collapsing of tower at Multiple locations	26.05.2024		59	On 26.05.2024 due to heavy rain and storm in various parts of Maharashtra multiple line tripping and tower collapse were reported
4	Grid event in Mumbai & MMR during thunder storm.	13.05.2024	15:46	357	Due to 220 kV Bus-2 tripping at 400/220 kV Kalwa ss and Multiple trippings in MMR, approximately 357 MW load affected in Mumbai & MMR.
5	Bus 2 Tripping at 400/220 KV Pune Talegaon	26.04.2024	13:49	496	On Dtd. 26.04.2024, at 13.49 Hrs, due to 2200 A current flow, the lower two conductors of Y phase of the bus-1 snapped and dropped down on the R phase IPS tube of Shikrapur ckt-3 bay. This created a bus fault and the busbar protection of 400 kV bus-2 operated immediately.
6	220 kV Tarapur – Borivali line tripped on overcurrent protection	17.04.2024	12:04	181	Critical high loadings of multiple transmission lines and ICTs resulting in N-1 non-compliance & low voltages at multiple 400 kV nodes in Pune, Mumbai and MMR Region.
7	Under voltages in Pune Region	20.02.2024	10:00	221	Due to very low voltage at various substations reaching emergency under voltage limit of 372 kV in the Pune, load shedding was carried out on AG & non-AG to the tune of 221 MW from 10:00 Hrs to 11:45 Hrs at 400 kV Lonikand S/s and 400 kV Jejuri S/s.
8	220KV Y phase PT of ' A-Bus' flashover at 400kV Kharghar S/s	02-02-2024	13:25	26	220 KV A bus tripped alongwith 220 kV feeders , ICT/T/Fs and 33 kV feeders; 1) 220KV khr- Ulwe-I line 2) 220KV khr- khandeshwar-II line 3) 220KVkhr-sonkhar line 4) 220KV Khr-Netmagic line 5) 220/33KV 50MVA PTR-2 6) 220/33kv 50MVA PTR-3 7) 400/220kv 315MVA ICT-III 8) 220 kv Buscoupler

Annexure 1.2

Based on the studies carried out by the Task Force, the additional requirement of Capacitor banks in Pune, Nashik & Vashi area is shown below:

Sr. No.	Voltage Level (kV)	Pune Area		
		No. of S/s. with Voltage less than 0.9 (PU)	Compensation proposed at No. of S/s.	Proposed Compensation (MVar)
1	11	9	7	50
2	22	48	47	575
3	33	32	22	285
4	100	-	-	-
5	110	5	1	30
6	132	77	9	255
7	220	54	2	120
	Total	225	88	1315

Sr. No.	Voltage Level (kV)	Nashik Area		
		No. of S/s. with Voltage less than 0.9 (PU)	Compensation proposed at No. of S/s.	Proposed Compensation (MVar)
1	11	3	-	-
2	22	-	-	-
3	33	9	3	70
4	100	-	-	-
5	110	-	-	-
6	132	6	2	90
7	220	-	-	-
	Total	18	5	160

Sr. No.	Voltage Level (kV)	Vashi Area		
		No. of S/s. with Voltage less than 0.9 (PU)	Compensation proposed at No. of S/s.	Proposed Compensation (MVar)
1	11	1	-	-
2	22	34	4	70
3	33	4	3	60
4	100	21	2	80
5	110	-	-	-
6	132	1	3	-
7	220	11	13	500
	Sub-Total	72	25	710



**Draft Procedure for
Computation of TTC/ATC for the State
of Maharashtra**

In accordance with
The Central Electricity Regulatory Commission
Order No. L-1/261/2021/CERC dated
29.09.2023

Prepared by

Maharashtra State Load Despatch Centre

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PROCEDURE FOR LOAD CURTAILMENT IN THE STATE OF MAHARASHTRA

1. INTRODUCTION:

- 1.1. Central Electricity Regulatory Commission (Connectivity and General Network Access to the inter-State Transmission System) Regulations, 2022 (hereinafter called 'GNA Regulations') were published on 19.07.2022 in Part III, Section 4 of the Gazette of India (Extraordinary) No 364.
- 1.2. In accordance with Regulation 39.2 of the GNA Regulations, NLDC has submitted a Detailed Procedure in respect of Regulation 36 of the GNA Regulations, which has been approved by Hon'ble CERC vide Order No. L-1/261/2021/CERC dated 29.09.2023.
- 1.3. In accordance with the Clause No. 4, "Declaration of Total Transfer Capability (TTC), Available Transfer Capability (ATC) and Transmission Reliability Margin (TRM)" SLDC in consultation with RLDCs shall declare import & export TTC, ATC and TRM of the individual control/bid areas within the region in accordance with the Regulation No. 44 (3) of the IEGC, 2023.
- 1.4. In accordance with above, this document describes procedure for computation of the TTC, ATC & TRM of the State of Maharashtra.
- 1.5. The procedure lays down the roles & responsibilities along with timelines for submission of data & assessment of TTC and ATC for the import or export for the State of Maharashtra.

2. SCOPE:

- 2.1. This procedure shall be applicable to MSLDC, STU, all the Transmission Licensees, all the Distribution Licensees including deemed Distribution Licensees, Generating Companies and Transmission System Users in the State of Maharashtra.

3. TIMELINES AS PER CERC ORDER:

3.1. Hon'ble CERC, vide Order No. L-1/261/2021/CERC dated 29.09.2023 has notified a "Detailed Procedure for Allocation of Transmission Corridor for Scheduling of General Network Access and Temporary General Network Access under Central Electricity Regulatory Commission (Connectivity and General Network Access to the inter-State Transmission System) Regulations, 2022." The timelines specified in the said procedure is as below:

3.2. For Revision – 0 for “M – 12”:

Purpose	SI No	Action of Stakeholder	Responsibility	Submission to	Data/Information Submission Time line
1. Revision 0 TTC/ATC Declaration for Month 'M'	1(a)	Submission of node wise Load and generation data along with envisaged scenarios for assessment of transfer capability	SLDC	RLDC	10 th Day of 'M-12' month
		Assessment of TTC/ATC of the import/export capability of the state and intra-state system and sharing of updated network simulation models			
	1(b)	Declaration of TTC/ATC of the intra-state system by SLDC in consultation with RLDC			26 th Day of 'M-12' month
	1 (c)	Updating state and regional load & generation & modelling of inter-state & intra-state elements in the regional system base case	RLDCs	NLDC	26 th Day of 'M-12' month
	1 (d)	Assessment and declaration of TTC/ATC by RLDC for the intra-regional and interstate system & sharing of network simulation models			
	1 (e)	Update the All-India network model with inputs from RLDCs/SNA	NLDC	RLDCs	28 th Day of 'M-12' month
1(f)	Assessment and declaration of inter-regional, bid area and cross-border TTC/ATC on the website				

3.3. For Inter-connection Studies “M – 6”:

Purpose	Sl No	Action of Stakeholder	Responsibility	Submission to	Data/Information Submission Time line
2. Interconnection Studies for elements to be integrated in the month ‘M’	2(a)	Submission of node-wise load and generation data & sharing of network simulation models for intra-state elements coming in the next six months	SLDC	RLDC	8 th Day of ‘M-6’ month
	2(b)	Sharing of inter-connection study results			21 st Day of ‘M-6’ month
	2(c)	Updating state and regional load & generation & modelling of inter-state & intra-state elements coming in the next six months in the regional system base case	RLDCs	NLDC	13 th Day of ‘M-6’ month
	2(d)	Sharing of inter-connection study results			26 th Day of ‘M-6’ month
	2(e)	Update the All-India network model for interconnection studies	NLDC	RLDCs	15 th Day of ‘M-6’ month
	2(f)	Completion of inter-connection study for elements coming in the next six months			Last Day of ‘M-6’ month

3.4. For Month Ahead TTC/ATC “M – 1”:

3. Month Ahead TTC/ATC Declaration & Base case for Operational Studies for Month ‘M’	3(a)	Submission of node wise Load and generation data along with envisaged scenarios for assessment of transfer capability	SLDC	RLDC	8 th Day of ‘M-1’ month
		Assessment of TTC/ATC of the intra-state system and sharing of updated network simulation models			
	3(b)	Declaration of TTC/ATC of the intra-state system in consultation with RLDC	SLDC	RLDC	22 nd Day of ‘M-1’ month
	3(c)	Updating state and regional load & generation and modelling of inter-state & intra-state elements in the regional system base case	RLDCs	NLDC	22 nd Day of ‘M-1’ month
3(d)	Assessment and declaration of TTC/ATC for the intra-regional and interstate system & sharing of network simulation models				
	3(e)	Update the All-India network model with inputs from RLDCs/SNA	NLDC	RLDCs	24 th Day of ‘M-1’ month
	3(f)	Assessment and declaration of inter-regional and cross-border TTC/ATC on the website			

- 3.5.** Every month, three sets of different base cases shall be prepared by all the concerned LDCs.
- a) Base cases for Revision - 0 TTC/ATC Declaration.
 - b) Base cases for Interconnection Studies for new elements to be integrated.
 - c) Base cases for Month Ahead TTC/ATC Declaration & Operational Studies.
- 3.6.** The timelines for computation of TTC/ATC for the State and submission to WRLDC are tabulated as **Annexure – 3**.

4. METHODOLOGY FOR TTC/ATC COMPUTATION:

- 4.1.** The methodology for computation of TTC/ATC as per Hon'ble CERC "Detailed Procedure for Allocation of Transmission Corridor for Scheduling of General Network Access and Temporary General Network Access under Central Electricity Regulatory Commission (Connectivity and General Network Access to the inter-State Transmission System) Regulations, 2022" dated 29.09.2023 is as below.
- 4.2.** The TTC, ATC and TRM shall be assessed with the help of simulation studies such that all anticipated operating conditions in a particular month are covered. For this, the TTC computation studies may be carried out for at least following four time periods (i.e. considering the load-generation balance of four cardinal points on the monthly load curve or the sum of the absolute value of interregional/regional flow or both depending on the bid area in consideration for TTC assessment) of a typical day of the month.
- a) Solar Peak
 - b) Non-Solar Peak
 - c) Non-Solar Off-peak
 - d) Morning Peak Demand

If required, further granular resolution i.e. hourly, sub-hourly (15 min.) may also be considered for TTC assessment and declaration. This shall be in line with Grid Code 2023, Regulation 31(2)(d) under Operational planning.

- 4.3.** Separate limiting cases for computing the export and import capability corresponding to preferably four load-generation scenarios (as specified in point 4.2 above) for the time frame for which transfer capability is to be assessed shall be used in the simulation studies. If additional study cases, apart from the ones prepared for 04 time periods are prepared, then the same shall also be shared by the concerned SLDC with concerned RLDCs and vice-versa.
- 4.4. Import Transfer Capability:** While calculating the import transfer capability of a control/bid area, the load of the control/bid-area shall be kept considering the peak demand scenario. Then the load of the importing area(s) may be increased and/or generation of the importing area(s) may be backed down as per reverse merit order for conventional generators & commensurate generation outside the area shall be increased. This process shall be continued till a credible N-1 contingency causes some limiting constraint in the importing/exporting area or joining both areas.
- 4.5. Export Transfer Capability:** While calculating the export transfer capability of a control/bid area, the load of the control/bid-area shall be kept considering the off-peak demand scenario. Then the load of the exporting area may be decreased or generation of the exporting area(s) may be increased as per merit order and a commensurate decrease in generation will be done outside the area. This process shall be continued till a credible N-1 contingency causes some limiting constraint in the importing/exporting area or joining both areas.
- 4.6.** Following points shall be considered while assessing the import & export transfer capability:
- Reserve requirements/technical minimum should be honoured during scaling up/down of generation.
 - The dispatch of swing bus generators in the load flow solution results shall be within their technical maximum/minimum limits.
 - The swing bus in the load flow studies shall be located outside the importing/exporting area in the transfer capability assessment.
 - The credible N-1 contingencies considered in the TTC/ATC studies shall be as specified in the latest CEA Manual on Transmission Planning Criteria.
 - In the studies, the worst credible contingency shall be considered to ensure the following limits:
 - Equipment Loading (Thermal or any other operational Limit)

- Voltage Stability
- Transient Stability
- During the assessment of Total Transfer Capability, it shall be ensured that the Reliability Criteria specified for N-1 and N-1-1 contingencies in the latest CEA Manual on Transmission Planning Criteria are satisfied.
- Power Order and direction of the HVDC links shall be based on the envisaged scenarios and capability of the HVDC link. The same may also be modulated in the base-case for the particular scenario based on the power flow in AC lines/ICTs & bus voltages.
- The Transmission Reliability Margin (TRM) shall be kept within the total transfer capability to ensure that the interconnected transmission network is secure under a reasonable range of uncertainties in the system conditions. Computation of TRM for a region, control area or group of control areas may be based on the consideration of the following:
 - Size of largest generating unit in the importing control or bid area/group of control or bid areas.
 - Two per cent (2%) of the total anticipated peak demand met in MW of the control/bid area/group of control or bid areas (to account for forecasting uncertainties). Provided that either of the above TRM values may be decided by the concerned LDC to ensure the reliability of the system under prevailing system conditions.
- For base case preparation and simulation studies for transfer capability assessment of intra-state system, the realistic set points for HVDC and any other ISTS points may be varied by respective NLDC/RLDCs/SLDC after mutual consultation.

5. RESPONSIBILITIES OF DISTRIBUTION LICENSEES:

- 5.1.** In accordance with the Regulation No. 38.6 of the MEGC, 2020, all the Buyers in the State shall submit node-wise estimated demand for 4 scenarios to MSLDC for computation of TTC/ATC. The format for submission of node-wise demand is attached as **Annexure – 1**.

Hence, all the Distribution Licensees shall submit node-wise demand for each scenario to MSLDC in the prescribed format to MSLDC by:

- 4th day of each month for “M – 12”

- 1st Day of “M – 6” & “M – 1” day.

The Node is the Sub-Station mapped in PSSE case which shall not contain any electricity system, electrical plant or line below 132 kV except where generators are connected to the grid at 110 kV. Power flow into a lower voltage system from node shall be considered as load. Power flow from a lower voltage system into the electricity systems at the node shall be considered as generation. No separate node shall be considered if any generation or load radially connected to existing node.

- 5.2. Any additional information required for computation of TTC/ATC for the State by MSLDC shall be provided by the Distribution Licensees as and when required.
- 5.3. In case node-wise data is not provided by Distribution Licensees, then the data available with MSLDC shall be considered for carrying out studies.
- 5.4. Each Distribution Licensee in the State shall submit contact details of Main and Alternate officers to ensure smooth communication & submission of timely data to MSLDC/STU.

Provided that in case of changes in the details of nodal officers, the same shall be communicated to MSLDC immediately to avoid lapses in communication.

6. RESPONSIBILITIES OF TRANSMISSION LICENSEES:

- 6.1. All the Transmission Licensees shall submit details of newly commissioned Transmission Elements to STU in the prescribed format attached as **Annexure – 2** to STU by 2nd day of each month.
- 6.2. All the Transmission Licensees shall submit details of Transmission Elements expected to be commissioned within next six (6) months for the Month “M – 6” day to STU in the prescribed format attached as **Annexure – 2** to STU by 2nd day of each month.
- 6.3. All the Transmission Licensees shall submit details of Transmission Elements expected to be commissioned within next one (1) month for the Month “M – 1” day to STU in the prescribed format to STU by 2nd day of each month.
- 6.4. Any additional information required for computation of TTC/ATC for the State by MSLDC shall be provided by the Transmission Licensees as and when required.

- 6.5.** In case data is not provided by Transmission Licensees, then the data available with STU/MSLDC shall be considered for carrying out studies.
- 6.6.** Each Transmission Licensee in the State shall submit contact details of Main and Alternate officers to ensure smooth communication & submission of timely data to MSLDC/STU.

Provided that in case of changes in the details of nodal officers, the same shall be communicated to MSLDC immediately to avoid lapses in communication.

7. RESPONSIBILITIES OF STU:

- 7.1.** STU shall model all the newly commissioned Transmission Elements in the PSSE file and submit the same to MSLDC by 4th day of each month.
- 7.2.** STU shall model all the Transmission Elements expected to be commissioned within next six (6) months in the PSSE file and submit the same to MSLDC by 4th day of each month.
- 7.3.** STU shall model all the Transmission Elements expected to be commissioned within next one (1) month in the PSSE file and submit the same to MSLDC by 4th day of each month.
- 7.4.** STU shall submit contact details of Main and Alternate officers to ensure smooth communication & submission of timely data to MSLDC.

Provided that in case of changes in the details of nodal officers, the same shall be communicated to MSLDC immediately to avoid lapses in communication.

8. RESPONSIBILITIES OF MSLDC:

- 8.1.** By the 27th of every month, MSLDC shall share the latest 'All India PSSE Base case' updated by NLDC to STU for updating the details of newly/upcoming transmission elements.
- 8.2.** MSLDC shall derive anticipated demand for all the nodes considering past trends, current demand scenario & estimates received from Distribution Licensees for all the four scenarios and map the same in PSSE file received from STU by 6th day of each month.
- 8.3.** By 6th & 7th day of every month, MSLDC & STU shall jointly undertake simulation studies for computation of TTC/ATC of the State in accordance with the CERC Procedure specified above.

- 8.4.** The results of the scenario-wise TTC/ATC for the State and constraints observed if any shall be submitted to WRLDC by 9th day of each month in case of “M – 12” month.
- 8.5.** In case of “M – 6” month, the simulation study files shall be submitted by MSLDC to WRLDC by 7th day of each month and the Inter-connection study results shall be submitted to WRLDC by 20th day of each month.
- 8.6.** The results of the scenario-wise TTC/ATC for the State and constraints observed if any shall be submitted to WRLDC by 7th day of each month in case of “M – 1” month.
- 8.7.** The TTC/ATC for the State shall be declared by MSLDC in consultation with WRLDC on 26th day of each month in case of “M – 12” month.
- 8.8.** The TTC/ATC for the State shall be declared by MSLDC in consultation with WRLDC on 21st day of each month in case of “M – 1” month.
- 8.9.** MSLDC shall declare contact details of Main and Alternate officers to ensure smooth communication with all the Stake holders in the State. The list of nodal officers of all the Stake holders shall be made available on website by MSLDC.

Provided that in case of any changes in the details of nodal officers, the list shall be revised as and when changes are reported to MSLDC.

9. REMOVAL OF DIFFICULTIES:

- 9.1.** This procedure aims at prompt and pragmatic implementation of computation of TTC/ATC for the State of Maharashtra. However, some teething problems may still be experienced. The various implications would be known only after practical experience is gained by way of implementing these procedures. In order to resolve the same, this procedure shall be reviewed or revised by the MSLDC with prior approval of GCC.
- 9.2.** In case of any difficulty in implementation of this procedure and/or amendments in the procedure developed by NLDC, MSLDC may approach the GCC through OCC for review or revision of the procedure with requisite details.

10. GENERAL:

10.1. All costs/expenses/charges associated with the implementation of said procedure shall be borne by the concerned Transmission/Distribution Licensees, Control Centres or Users.

10.2. The concerned Transmission/Distribution Licensees, Control Centres or Users shall abide by the provisions of the Electricity Act, 2003, the MERC Regulations, Indian Electricity Grid Code and MERC (State Grid Code) Regulation - 2020, and applicable CERC and MERC regulations & Procedures as amended from time to time.

---X---

Format – 1

**Node-wise Demand Data to be submitted by Distribution Licensees
in the State**

Bus Number	Bus Name	S/s name	In Service	Morning Peak		Solar Peak		Evening Peak		Off-Peak	
				Pload (MW)	Qload (Mvar)	Pload (MW)	Qload (Mvar)	Pload (MW)	Qload (Mvar)	Pload (MW)	Qload (Mvar)

Note: The formats are not exhaustive and may be changed suitably based on the requirement.

Format - 2

To be submitted by Transmission Licensees to STU

Format for newly/Expected commissioned EHV Sub-Station:

Date of Commercial Operation	Bus Name	Bus No.	Base Voltage (kV)	Bus Type *	Shunt Admittance	
					Conductance (MW)	Susceptance (MVAR)

(*) Bus Type:- (1) Load Bus; (2) Generator Bus; (3) Swing Bus;

Format for Generators:

Date of Commercial Operation	Bus Name	Machine Identifier (ID)	MW Output (PG)	Max MW (PT)	Min MW (PB)	MVAR Output (QG)	Max MVAR (QT)	Min MVAR (QB)

Voltage Set point (VS)	Remote Controlled Bus Index (IREG)	MVA Base (MBASE)	Machine Impedance (pu on MBASE)		Step up Transformer Impedance (pu on MBASE)		Off Nominal Tap Ratio	RMPCT
			Resistance (ZR)	Reactance (ZX)	Resistance (RT)	Reactance (XT)		

Format for Transmission Lines:

Date of Commercial Operation	From Bus Name	From Bus No.	To Bus Name	To Bus No.	Ckt ID	Length (km)	Owner	Type of Line	Line configuration	Shunt Admittance				Operational Limits			Electrical Parameters (In Per Unit)		
										From Bus		To Bus		SIL Limit	Thermal loading Limit	Emergency loading limit	R	X	B
										G	B	G	B						

Format for ICTs:

Date of Commercial Operation	From Bus Name	To Bus Name	Ckt ID	Rate A	Rate B	Rate C	Nominal Tap Ratio	Transformer Phase shift angle	Resistance (R)	Reactance (X)	Controlled Bus	Max. Turns Ratio	Min. Turns Ratio	Max Controlled Volts	Min Controlled Volts	Turns Ration Step Increment	Table

Format for HVDC:

Date of Commercial Operation	DC Line Number	Control Mode	Resistance	Current or Power	Scheduled Compounded DC	Mode Switch DC Volta	Compounding Resistance	Current Margin	Metered end Code	Rectifier converter Bus number	Number of Bridges	Max Rectifier firing angle	Minimum Rectifier firing	Rectifier Commutating Transfo	Rectifier Commutating Transfo	Rectifier Primary Base	Rectifier Transformer ratio	Rectifier Tap setting	Maximum Rectifier Tap Settin	Minimum Rectifier Tap	Rectifier Tap step	

Format for SCR:

Date of Commercial Operation	Bus Name	Mode	Voltage Upper Limit	Voltage Lower Limit	Voltage Set point	N1	B1	N2	B2

Format for FACT Devices:

Voltage Level (kV)	Substation Name	FACT Device Type	Sub Device Name	Voltage level of Sub Device	Total Number of Sub Devices	MVAR/ MVA Rating	In Voltage	Out Voltage	Slope (%)	Impedance (%)	Connection Type (Star, Delta), Vector Group

Roles & Responsibilities for monthly TTC/ATC Computation for the State								
Month	Notified Date	Activity	Responsibility	Target Date	Sub Activities	Sub-Responsibility		
M - 11	10	Submission of Scenario-wise Load Projection	Discoms	1 to 4	As per Regulation No. 38.6 of MEGC' 2020, all the Buyers shall submit node-wise estimated Demand for 4 scenarios to SLDC	All Distribution Licensees in the State		
		Submission of latest Transmssion Network list for the State	Transcos & STU	1 to 2	Submission of list of newly commissioned transmission elements to STU	All Transmission Licensees in the State		
				3 to 4	Consolidation of all the information in the format, mapping on PSSE file & submission to SLDC	STU		
		Scenario-wise & Node-wise Load - Generation Projection for the State	SLDC	1 to 2	Retrival of meter data for the last month & for the month of last year.	Energy Accounting		
				3	Identification of Demand for all the 4 scenarios declared by NLDC	Operation		
				3	Based on identified Demand scenarios, fetching Sub-Station-wise Demand & Generation metered data from DSM System	Energy Accounting		
				1 to 2	Generation Projections considering AoH	Operation		
				4	Identification of Demand Pattern & Node-wise Load-Generation projections for the month 'M' considering projections submitted by Discoms & DSM metered data	Operation		
		Modelling Node-wise Load & Generation (Four Scenarios) and latest Transmission Elements	SLDC	5 to 6	Modelling of Node-wise Load-Generation data for 4 scenarios along with latest Transmission Elements	Operation		
		Study & assess TTC/ATC	SLDC & STU	7	Assessment of TTC/ATC based on contingencies for 2 scenarios	Operation & STU		
				8	Assessment of TTC/ATC based on contingencies for remaining 2 scenarios	Operation & STU		
				9	Submission of PSS/E files along with TTC/ATC assessment to WRLDC	Operation		
				Submission of latest Transmssion Network list & list of transmission elements likely to be commissioned by the month 'M' for the State	Transcos & STU	1 & 2	Submission of list of newly commissioned transmission elements to STU	All Transmission Licensees in the State
						3 & 4	Consolidation of all the information in the format, mapping on PSSE file & submission to SLDC	STU
Submission of Scenario-wise Load Projection	Discoms			1	As per Regulation No. 38.6 of MEGC' 2020, all the Buyers shall submit node-wise estimated Demand for 4 scenarios to SLDC	All Distribution Licensees in the State		
				1	Retrival of meter data for the last month & for the month of last year.	Energy Accounting		

Roles & Responsibilities for monthly TTC/ATC Computation for the State								
Month	Notified Date	Activity	Responsibility	Target Date	Sub Activities	Sub-Responsibility		
M - 6	8	Scenario-wise Load - Generation Working for the State	SLDC	2	Identification of Demand for all the 4 scenarios declared by NLDC	Operation		
				2	Based on identified Demand scenarios, fetching Sub-Station-wise Demand & Generation metered data from DSM System	Energy Accounting		
				2	Generation Projections considering AoH	Operation		
				3	Identification of Demand Pattern & Node-wise Load-Generation projections for the month 'M' considering projections submitted by Discoms & DSM metered data	Operation		
				Modelling Node-wise Load & Generation (Four Scenarios) and latest Transmission Elements	SLDC	4	Modelling of Node-wise Load-Generation data for 4 scenarios along with latest Transmission Elements	Operation
				Study & assess TTC/ATC	SLDC & STU	5	Assessment of TTC/ATC based on contingencies for 2 scenarios	Operation & STU
						6	Assessment of TTC/ATC based on contingencies for remaining 2 scenarios	Operation & STU
						7	Submission of PSS/E files along with TTC/ATC assessment to WRLDC	Operation
		M - 1	8	Submission of latest Transmission Network list & list of transmission elements likely to be commissioned by the month 'M' for the State	Transcos & STU	1 & 2	Submission of list of newly commissioned transmission elements to STU	All Transmission Licensees in the State
				3 & 4	Consolidation of all the information in the format, mapping on PSSE file & submission to SLDC	STU		
Submission of Scenario-wise Load Projection	Discoms			1	As per Regulation No. 38.6 of MEGC' 2020, all the Buyers shall submit node-wise estimated Demand for 4 scenarios to SLDC	All Distribution Licensees in the State		
Scenario-wise Load - Generation Working for the State	SLDC			1	Retrival of meter data for the last month & for the month of last year.	Energy Accounting		
				2	Identification of Demand for all the 4 scenarios declared by NLDC	Operation		
				2	Based on identified Demand scenarios, fetching Sub-Station-wise Demand & Generation metered data from DSM System	Energy Accounting		
				2	Generation Projections considering AoH	Operation		
				3	Identification of Demand Pattern & Node-wise Load-Generation projections for the month 'M' considering projections submitted by Discoms & DSM metered data	Operation		

Roles & Responsibilities for monthly TTC/ATC Computation for the State						
Month	Notified Date	Activity	Responsibility	Target Date	Sub Activities	Sub-Responsibility
		Modelling Node-wise Load & Generation (Four Scenarios) and latest Transmission Elements	SLDC	4	Modelling of Node-wise Load-Generation data for 2 scenarios along with latest Transmission Elements	Operation
		Study & assess TTC/ATC	SLDC & STU	5	Assessment of TTC/ATC based on contingencies for 2 scenarios	Operation & STU
				6	Assessment of TTC/ATC based on contingencies for remaining 2 scenarios	Operation & STU
				7	Submission of PSS/E files along with TTC/ATC assessment to WRLDC	Operation



MAHARASHTRA STATE ELECTRICITY TRANSMISSION CO.LTD.
CIN NO. U40109MH2005SGC153646

Office of The Chief Engineer

Maharashtra State Load Dispatch Center

Thane-Belapur Road, P.O. Airoli, Navi Mumbai Pin – 400 708.

Tele: 91-22-27601765 / 1766; Fax: 91-22-27601769 Email: cesldc@mahasldc.in

Ref: MSLDC/TECH/OP/ TTC-ATC/ No 0 0 9 0 3

Date: 19 MAY 2024

Sub: Formation of Working Group for undertaking Year-ahead TTC/ATC Computation, Six-monthly Interconnection studies & PoC data.

Central Electricity Regulatory Commission (Connectivity and General Network Access to the inter-State Transmission System) Regulations, 2022 were published on 19.07.2022 in Part III, Section 4 of the Gazette of India (Extraordinary) No 364.

In accordance with Regulation 39.2 of the GNA Regulations, NLDC has submitted a Detailed Procedure in respect of Regulation 36 of the GNA Regulations, which has been approved by Hon'ble CERC vide Order No. L-1/261/2021/CERC dated 29.09.2023.

In accordance with the Clause No. 4, "Declaration of Total Transfer Capability (TTC), Available Transfer Capability (ATC) and Transmission Reliability Margin (TRM)" SLDC in consultation with RLDCs shall declare import & export TTC, ATC and TRM of the individual control/bid areas within the region in accordance with the Regulation No. 44 (3) of the IEGC, 2023.

Hon'ble CERC, vide Order No. L-1/261/2021/CERC dated 29.09.2023 has notified a "Detailed Procedure for Allocation of Transmission Corridor for Scheduling of General Network Access and Temporary General Network Access under Central Electricity Regulatory Commission (Connectivity and General Network Access to the inter-State Transmission System) Regulations, 2022." The timelines specified in the said procedure are attached herewith as Annexure – 1.

In view of above, MSLDC has published draft procedure for conducting all the required activities for the State in a time bound manner. This draft procedure was discussed in the 7th OCC meeting held on 14.02.2024, wherein OCC has recommended to submit the said procedure in the ensuing GCC meeting for ratification. Further, OCC directed MSLDC to constitute a Working Group comprising of members from major Stake holders. The timelines to be followed by the State & respective Stake holders is attached as Annexure – 2.

Accordingly, a Working Group of following officers has been constituted:

Sr. No.	Name of Officer	Organization	Responsibility
1	Shri. Sachin Lomate	MSLDC, Airoli	Consolidating & modelling load data, newly commissioned elements, elements likely to be commissioned within next 6 months, etc in PSSE case file, Conducting simulation studies, submission of data to WRLDC
2	Shri. Pankaj Shinde	ALDC, Ambazari	
3	Shri. Abhishek Samant	MSLDC, Airoli	
4	Shri. Vinay Khedekar	STU	
5	Shri. Rajesh Prasad	STU	

Sub: Formation of Working Group for undertaking Year-ahead TTC/ATC Computation, Six-monthly Interconnection studies & PoC data.

6	Shri. Gopichand Ghodke	MSEDCL	Submission of Node-wise demand at four cardinal points and Peak Block (PoC) declared by NLDC for its Control area to MSLDC.
7	Shri. Vikas Pimpalshende	MSEDCL	
8	Mrs. Devyani Kamble	Railways	
9	Shri. Rupesh Udale	Railways	
10	Shri. Deepak Veer	TPCL	Submission of Node-wise demand at four cardinal points and Peak Block (PoC) declared by NLDC for its Control area to MSLDC.
11	Shri. Sadanand Bhalekar	TPCL	
12	Shri. Rajju Hassan	AEML	
13	Shri. Nishant Gonnade	AEML	Submission of details of newly commissioned elements & elements likely to be commissioned within next 6 months to STU for mapping in PSSE Case file.
14	Shri. Nitin Hame	BEST	
15	Shri. Javed Mulla	BEST	

The above Working Group shall:

- 1) Carry out all the activities assigned in the applicable CERC Regulations & NLDC Procedure in time bound manner and adhere to the timelines specified in the MSLDC Procedure & NLDC Procedure.
- 2) Carry out simulation studies jointly for computation of year-ahead TTC/ATC for the State on each month.
- 3) The Group shall report to the Superintending Engineer (Operation), MSLDC.
- 4) Apart from MSLDC & STU, other members, if having adequate knowledge of PSSE Software can participate in joint simulation studies to reduce the time for submission of data to WRLDC.

Encl: As above.


(Mahesh Bhagwat)
10/05/24
Chief Engineer
MSLDC, Airoli

Copy s.w.r.s. to:

- The Executive Director, MSLDC, Airoli.

Copy f.w.e. to:

- The Chief Engineer (STU), Prakashganga, Mumbai.
- The Chief Engineer (Power Purchase), MSEDCL, Prakashgad, Mumbai.
- The Head (PSCC), TPCL, Mumbai.
- The Head (Transmission), AEML, Mumbai.
- The Dy. Chief Engineer, BEST, Mumbai.
- The Dy. Chief Engineer, Railways, Mumbai.

Copy to:

- The Superintending Engineer (Operation), MSLDC, Airoli.
- The Superintending Engineer, ALDC, Ambazari.
- All the Working Group Members.

Roles & Responsibilities for monthly TTC/ATC Computation for the State

Month	Notified Date	Activity	Responsibility	Target Date	Sub Activities	Sub-Responsibility		
M - 11	10	Submission of Scenario-wise Load Projection	Discoms	1 to 4	As per Regulation No. 38.6 of MEGC' 2020, all the Buyers shall submit node-wise estimated Demand for 4 scenarios to SLDC	All Distribution Licensees in the State		
		Submission of latest Transmission Network list for the State	Transcos & STU	1 to 2	Submission of list of newly commissioned transmission elements to STU	All Transmission Licensees in the State		
				3 to 4	Consolidation of all the information in the format, mapping on PSSE file & submission to SLDC	STU		
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Roles & Responsibilities for monthly TTC/ATC Computation for the States

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