

**Minutes of the 1st Grid Co-ordination Committee Meeting held at SLDC,
Airoli, Navi Mumbai on 08th January 2021 at 15.00 hrs.**

No. ED/SLDC/AIROLI/0102

Date :- 01/02/2021

The Grid Co-ordination Committee (GCC) has been formed vide letter no. MSETCL/CO/STU/MEGC 2020/SLDC/05341 Dtd 11.12.2020. The First Grid Co-ordination Committee (GCC) meeting of Core Group was held on 08th January 2021 at SLDC, Airoli, Navi Mumbai. The list of members/participants is enclosed as per Annexure - I.

Executive Director (MSLDC), Convener Member, GCC welcomed all the GCC members and other participants in the first GCC Meeting.

Director (Operations) MSETCL, Chairman of GCC stated that GCC Core Group being an apex body for implementation of MEGC, 2020 Regulation in the state of Maharashtra, it will facilitate implementation of these Regulations by formation of suitable procedures, code of operations, manuals & guidelines. He further expressed confidence that GCC will operate in a very cohesive manner for giving effect to the various provisions of MEGC, 2020 for coordinated development of power sector in Maharashtra.

In the first GCC meeting following agenda items were discussed.

Agenda Point - 1 and 2: Acceptance of business rules and formation of functional committees as per MEGC, 2020.

The business rules prepared by STU in consultation with SLDC have been presented before the committee for acceptance. GCC Members have discussed and unanimously adopted the business rules for smooth business and conduct of GCC meetings.

The composition of functional committees as specified under MEGC, 2020 was proposed in the meeting. The members of GCC discussed and accepted the composition of functional committees as below:

A. Members of Maharashtra Transmission Committee (MTC):

1. Chief Engineer, State Transmission Utility (STU) - Chairperson of MTC
2. Superintending Engineer, State Transmission Utility (STU) - Member Convener;
3. Chief Engineer (MSLDC) - Member;
4. Representative of State-Owned Transmission Licensees in the State - Member;
5. Representative of State-Owned Distribution Licensees in the State - Member;
6. Representative of State-Owned Generating Company - Member;
7. One Representative of Private Transmission Licensee having highest transmission network in Circuit-Km in the previous financial year - Member;
8. One Representative from each Mumbai Transmission Licensees - Member;
9. Representative of the Indian Railways in the State - Member;
10. One Representative from each Mumbai Distribution licensees - Member;

As per clause 7 & sub clause 7.1 (a) and clause 7.3 of MEGC 2020, the functions of Maharashtra Transmission Committee (MTC) are as below:

- I. MTC shall meet at least once every six months and deliberate on all technical and operational aspects of Planning Code and Connection Code and shall provide their suggestions/recommendations to GCC. MTC shall also deliberate on timely execution of scheme and issues related thereof and monitor the execution of transmission related projects in the State and provide their suggestions/recommendations to GCC.
- II. MTC shall perform the following functions:
- a) Coordinate system planning, maintenance schedule and contingency plan to ensure adequate transmission system planning;
 - b) Review of existing interconnection equipment for alteration, addition, if necessary, so as to comply with the Connection Conditions provided in the MEGC/IEGC;
 - c) Review the load estimate (long term) and the methodology and assumptions made by the Users;
 - d) Review and finalize the proposals identified on the basis of planning studies;
 - e) Prepare a report on the execution of various planning related activities and achievement of milestones on a six-monthly basis and submit to GCC;
 - f) Study and suggest projects to be implemented under Tariff Based Competitive Bidding (TBCB) to optimize the project cost;
 - g) Study and propose the new technology in the Transmission System such as HVDC, HTLS, GIS, Monopoles etc. for the strengthening of the InSTS and any other function as directed by the GCC;
 - h) Monitor the transmission related projects under execution and analyze the reasons for delay if any with propose way forward; and
 - i) Any other function as directed by the GCC.
- III. MTC shall also undertake scrutiny of Transmission system augmentation proposals prepared by Transmission Licenses and provide its recommendations to GCC for addition of new substation(s) or new transmission line or augmentation of capacity of existing substation or transmission line which STU shall consider for further planning,

B. Members of Operation Coordination Committee (OCC):

1. Executive Director, State Load Despatch Center (SLDC) - Chairperson of OCC
2. Superintending Engineer (Operations), SLDC - Member Convener;
3. Chief Engineer, State Load Despatch Center (SLDC) - Member;
4. Chief Engineer, State Transmission Utility (STU) - Member;
5. Representative of State-Owned Transmission Licensees in the State - Member;

6. Representative of State-Owned Distribution Licensees in the State - Member;
7. Representative of State-Owned Generating Company - Member;
8. One Representative from each Private Transmission Licensees in the State - Member;
9. One Representative from each Private Power Generating Companies in the State - Member;
10. Representative of Renewable Energy (RE) Generators in the State; One member each from Wind, Solar, Biomass, Bagasse and Small Hydro. (Representation of each RE generators in the state will be given on rotational basis every year in alphabetical order.)

As per clause 7 & sub clause 7.1(b) and clause 7.4 of MEGC 2020, the functions of Operation Coordination Committee (OCC) are as below:

- I. OCC shall meet at least once every quarter (three months) and coordinate on all technical aspects of system operation, load despatch and shall provide recommendations to the GCC.
- II. OCC shall perform the following functions:
 - a) Review and analyse the grid disturbances and system restoration procedure;
 - b) Review the reactive compensation mechanism for InSTS;
 - c) Review and finalize planned outage plan of STU;
 - d) Review the load curtailment mechanism;
 - e) Review the installation of Disturbance Recorders, Event Loggers, Under Frequency Relays (UFR), df/dt relays etc. in the InSTS;
 - f) Review and study the implementation of governor mode of operation for the generating stations in the State;
 - g) Review of Renewable Energy Curtailment and formulate means of avoiding/reducing it;
 - h) Review of Transmission Constraint cases noticed by SLDC and suggest the recommendations; and
 - i) Any other function as directed by the GCC.

C. Members of Protection Coordination Committee (PCC):

1. Chief Engineer (Protection) MSETCL - Chairperson of PCC;
2. Superintending Engineer, (Trans O&M), MSETCL, C.O. OR S.E.(Prot.) A,C&I - Member Convener;
3. Chief Engineer, State Transmission Utility (STU) - Member;
4. Chief Engineer (SLDC) - Member;
5. Representative of State-Owned Transmission Licensees in the State - Member;
6. Representative of State-Owned Distribution Licensees in the State - Member;
7. Representative of State-Owned Generating Company - Member;
8. One Representative from each Private Transmission Licensees in the State - Member;
9. One Representative from each Private Power Generating Companies/IPPs in the State - Member;

10. Representative of Renewable Energy (RE) Generators in the State; One member each from Wind, Solar, Bagasse and Small Hydro. (Representation of each RE generators in the state will be given on rotational basis every year in alphabetical order.

As per clause 7 & sub clause 7.1(c) and clause 7.5 of MEGC 2020, the functions of Protection Coordination Committee (PCC) are as below:

- I. PCC shall meet at least once every quarter (three months) and coordinate regarding the implementation of Protection Code to ensure that Users of InSTS discharge their obligations under the Protection Code.
- II. PCC shall perform the following functions:
 - a) Assist STU to prepare protection manual under Protection Code;
 - b) Ensure compliance of Protection Code;
 - c) Specify the minimum protection requirements for the User's system connected to the InSTS;
 - d) Deliberate and decide various protection settings, testing procedure and periodicity;
 - e) Review the requirement of up gradation of protection schemes and necessary switchgear equipment;
 - f) Analyse the failure of protection system in case of major grid disturbance and suggest modifications and alterations;
 - g) Review the suggestion of Users for revision of protection code; and
 - h) Any other function as directed by the GCC.

D. Members of Metering and Communication Coordination Committee (MCCC):

1. Chairman, Director (Operations) MSETCL/STU.
2. Chief Engineer (AC & I), MSETCL - Member Secretary;
3. Executive Director/Chief Engineer, State Load Dispatch Center.
4. Five Representative of Generating Companies/IPP's in the State having maximum generation capacity.
5. One representative from each Transmission Licensee in the State.
6. One representative from each Distribution Licensee in the State.
7. Three representatives from Solar Power Producers having maximum power generation capacity.
8. Three representatives from Wind Power Producers having maximum power generation capacity.
9. Three representatives from Bagasse Co-gen Power Producers having maximum power generation capacity.
10. Two representatives from Hydro Power Producers having maximum power generation capacity.

As per clause 7 & sub clause 7.1(d) and clause 7.6 of MEGC 2020, the functions of Metering and Communication Coordination Committee (MCCC) are as below :

- I State Transmission Utility shall be responsible for managing and serving the Metering Code for InSTS of Maharashtra with each constituents/Users of InSTS discharging respective obligations under the Metering Code.

- II MCCC shall meet at least once every six months and coordinate regarding the implementation of Metering Code to ensure that Users of the InSTS discharge their obligations under the Metering Code.
- III MCCC shall perform the following functions:
- a) Ensure compliance of Metering Code;
 - b) Review deviations in the existing CT and PTs/CVTs from the minimum specifications prescribed in Annexure-I of MEGC and upgradation/ replacement of the same within one year from the date of notification of MEGC;
 - c) Deliberate and decide the issues related to metering and metering failure for DSM account and energy account;
 - d) Review correctness and efficacy of the assessment methodology used for Metering defects, data loss etc;
 - e) Deliberate and decide the issues related to communication aspects of AMR/MRI;
 - f) To issue guidance on the interpretation and implementation of the Metering Code.
 - g) Review and propose amendments in metering arrangement and metering code;
 - h) To publish recommendations for changes to the Metering Code for InSTS together with the reason for the change and any objection if applicable
 - i) Periodic review of SCADA visibility of all Drawal & injection points; and
 - j) Any other function as directed by the GCC.

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The GCC directed that for functioning of these committees, such as seeking representation of members from respective entities, conducting of meetings and other functions as specified in MEGC, 2020, the member convener of respective committee shall take appropriate action in consultation of Chairperson of that committee. The GCC further directed that various reports as envisaged under MEGC, 2020 shall be prepared by respective committees/utilities and shall be submitted to GCC as per defined frequency for necessary actions. The abstract of such reports is enclosed as per Annexure II. Further any contentious /disputed issues of these functional committee shall invariably be referred to GCC for amicable resolutions.

The Committee noted and approved as above

Agenda Point - 3: Installation and commissioning of 125MVAR, 400kV Bus Reactor at 400kV Kalwa S/s.

ED (Trans), MSETCL placed before the GCC core group a proposal for installation and commissioning of 125MVAR, 400kV Bus Reactor at 400kV Kalwa S/s under Vashi Zone and inclusion thereof in the current STU plan for the years 2020-21 to 2024-25.

After detailed deliberations and discussions, the GCC core group considered the said proposal and recommended for inclusion of 125 MVAR, 400kV Bus Reactor at 400kV Kalwa sub-station in the current STU plan of the years 2020-21 to 2024-25 for further necessary action by MSETCL/STU.

MSETCL to take further action on priority basis for sanction and execution of the proposal.

The Committee noted and approved as above

Agenda Point - 4: Replacement of existing 0.5 ACSR Twin moose conductor alongwith insulators and hardwares by suitable HTLS Conductor alongwith insulators and hardwares of 400 kV Kalwa - Padghe Ckt. I & II under EHV O&M Circle, Kalwa.

ED (Trans), MSETCL placed before the GCC core group a proposal for Replacement of existing 0.5 ACSR Twin Moose conductor alongwith insulators and hardwares by suitable HTLS Conductor alongwith insulators and hardwares of 400 kV Kalwa - Padghe Ckt. I and Ckt. II under EHV O&M Circle, Kalwa and inclusion thereof in the current STU plan for the years 2020-21 to 2024-25. The said proposal is of very significance for strengthening of Mumbai System.

After detailed deliberations and discussions, the GCC core group considered the said proposal and recommended for inclusion of the same in the current STU plan for the years 2020-21 to 2024-25 and for further necessary action by MSETCL/STU.

MSETCL to take further action on priority basis for sanction and execution of the proposal.

The Committee noted and approved as above

Agenda Point - 5: Establishment of 132/33 kV Tirthpuri S/s, Tal.- Ghanswangi, Dist. Jalna.

ED (Trans), MSETCL placed before the GCC core group a proposal for "Establishment of 132/33 kV Tirthpuri S/s, Tal.-Ghanswangi, Dist. Jalna" under Aurangabad Zone and inclusion thereof in the current STU plan for the years 2020-21 to 2024-25. It was informed that MSEDCL has submitted demand for this substation to MSETCL.

After detailed deliberations and discussions, the GCC core group considered the said proposal and recommended for inclusion of the same in the current STU plan for the years 2020-21 to 2024-25 and for further necessary action by MSETCL/STU.

MSETCL to take further action on priority basis for sanction and execution of the proposal.

The Committee noted and approved as above

Agenda Point - 6: Discussion on Mumbai Grid disturbance occurrence on dt. 12.10.2020.

SE (Operations) MSLDC apprised the Grid Coordination Committee core group about partial Grid failure in MMR Region on 12.10.2020. He also apprised that the Enquiry Committee has been setup under the chairmanship of Shri Goutam Roy, Chief Engineer (PSPA-I), CEA to investigate the partial MMR grid failure occurred on 12.10.2020. It is further apprised to GCC Core Group that final report of committee is received on 04.01.2021.

Director (Operations), Chairman GCC directed MSLDC to make a detailed presentation of the salient features of the report in the next GCC meeting. He confirmed that GCC shall monitor the action taken report on the recommendations of the committee.

The Committee noted as above

Agenda Point - 7: Approval of procedure for instructions of Reserve Shut Down (RSD) to generating Units.

SE (Operations), MSLDC informed the GCC core group that as mandated by MEGC-2020 clause 36.9 of the Regulations, the State Load Dispatch Centre shall prepare a ***Detailed Procedure for Instructing RSD of Generating Unit(s) of the generating stations in the state of Maharashtra*** within one month of notification of the regulations.

MEGC-2020 Clause no. 5.3(b) is reproduced below:

GCC shall be responsible for the following matters, namely -

'Assessing and recommending remedial measures for issues that arise during the implementation of these Regulations and procedures developed under these Regulations;

Provided that, the GCC shall formulate suitable procedures, code of operation, manual and guidelines or revise such procedures/guidelines/manuals/code under these Regulations by undertaking stakeholder consultation and shall submit the same to the Commission'.

Accordingly MSLDC has prepared a ***Draft Detailed Procedure for Instructing RSD of Generating Unit(s) of the generating stations in the state of Maharashtra*** and has put up for approval of GCC. SE (Operations) also informed that the Draft procedure has been circulated to all core committee members.

MSDCL representative informed that they have received the Draft procedure and would require some time to submit their comments on the same. Chairman GCC requested all members to examine the procedure and submit their comments on the Draft procedure within 7 days i.e. by 15th of January 2021. After the submission of the same, MSLDC shall compile the comments, incorporate relevant comments and finalize the draft for submission to GCC for approval.

The Committee noted as above

Executive Director (MSLDC), Convener Member offered the vote of thanks to the chair, core group members and all other participants.



(S. V. JALTARE)
Executive Director
MSLDC, Kalwa

Annexure I

Core Group members						
Sr no.	Name of the Officers	Designation	Orgnization	Mobile No.	Email - ID	Remark
1	Shri. Sanjay Taksande	Director (Operations)/ STU	MSETCL	022-26592162	DIROP@mahatransco.in	-
2	Shri. Shrikant Jaltare	Executive Director	MSLDC	022-27301931	edmsebholding@gmail.com	-
3	Shri. S. S. Rajurkar	Executive Director (Trans)	MSETCL	9769509020	edtrans@mahatransco.in	-
4	Shri. Paresh Bhagwat	CE (PP)	MSEDCL	9769757766	ceppmsedcl@gmail.com	Representative Of Director (Commercial) MSEDCL
5	Shri. Girish Kumawar	CE (Works)	MSPGCL	8411958588	cegw@mahagenco.in	Through VC
6	Shri. Prasad Lone	SE (Commercial)	WRPC	9867622823	comm1-wrpc@nic.in	Through VC
Other Participants						
7	Shri. Shashank Jewalikar	CE (STU)	MSETCL	7709561235	cestu@mahatransco.in	-
8	Smt. Juelee Wagh	CE (MSLDC)	MSLDC	9819241773	cesldc@mahasldc.in	-
9	Shri. Peeyush Sharma	SE (Operation)	MSLDC	9167831551	SEOPR8000@mahatransco.in	-
10	Shri. Ram Kolhe	SE (SCADA)	MSLDC	9619985377	SESCADA8000@mahatransco.in	-
11	Shri. Eknath Dhengale	SE (EA)	MSLDC	9930401110	SEEA8000@mahatransco.in	-
12	Shri. Arun M. Surjuse	EE (Works)	MSPGCL	9979121445	arun.surjuse@gmail.com	-
13	Shri. D. K. Rokade	S.E (STU)	MSETCL	9167831551	sesys@mahatransco.in	-
14	Shri. Rajan Joshi	E.E (STU)	MSETCL	9987541505	ee12prj@mahatransco.in	-

Annexure II

Sr.No.	Name of the Report	Responsible Entity	Report to be submitted to:	Periodicity
1	Report of GCC Meeting	SLDC	MERC	Quarterly
2	Grid Code review	GCC	MERC	Yearly
3	Execution of planning related activities & milestone achievements	MTC	GCC	Half yearly
4	Availability of SCADA System	SLDC	GCC	Quarterly
5	Status of Ongoing transmission project	MTC	GCC/MERC	Quarterly
6	Voltage variation Index	Transmission Licensees	STU, SLDC	Half Yearly
7	Long Outages	SLDC	GCC	Quarterly
8	Inspection of UFR	OCC	GCC	Half Yearly
9	Performance audit of communication system	MCCC	GCC	Half Yearly
10	Performance Audit of Protection system	PCC	GCC	Half Yearly
11	SCADA/RTU Availability	MCCC	GCC	Monthly
12	Communication system index	SLDC	GCC	Quarterly
13	Reserve Shut down (RSD)	SLDC	Website	Monthly
14	MoM of GCC	SLDC	GCC	Quarterly
15	MoM of OCC	SLDC	GCC	Quarterly
16	Operational feedback	SLDC	GCC/STU/CTU	Quarterly
17	Misdeclaration of DC	SLDC	GCC	Quarterly
18	MoM of MTC/PCC/MCCC	MTC/PCC/MCCC	GCC	-