

Conduct of Business Rules

Grid Coordination Committee (GCC)

Year 2020





**CONDUCT OF BUSINESS RULES
GRID COORDINATION COMMITTEE (GCC)**
(Pursuant to Section 5 of MEGC, 2020)

**Prepared By
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First Edition



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CHAPTER I

GENERAL

1. Short title and commencement:

- (I) MERC, No. MERC/Legal/319- In exercise of the powers conferred by clause (zp) of sub-section (2) of Section 181 read along with Section 86 (1) (h) of the Electricity Act, 2003 (36 of 2003), the Maharashtra Electricity Regulatory Commission (MERC) has specified State Electricity Grid Code, known as Maharashtra Electricity Grid Code (MEGC) 2020 in consistent with the Grid Code specified by Central Electricity Regulatory Commission (CERC) under Section 79(1) of the EA, 2003.
- (II) As per the clause – 5.1 of the aforesaid Maharashtra Electricity Grid Code (MEGC) 2020, the STU In consultation with SLDC hereby makes the following rules which may be called “Grid Coordination Committee (Conduct of Business) Rules, 2020”.
- (III) These rules shall come into force from the date of its acceptance by the GCC and shall remain in force unless otherwise modified.

2. Definitions:

2.1 In these Rules unless the context otherwise requires:-

- a) ‘Act’ means the Electricity Act, 2003.
- b) ‘Agenda’ means the list of business proposed to be transacted at a meeting of the Committee.
- c) ‘Authority’ means Central Electricity Authority.
- d) ‘GCC’ means Grid Coordination committee which comprises of core group and Grid coordination conference.
- e) ‘Maharashtra Transmission committee (MTC)’ means a functional committee constituted by the GCC, Which shall be responsible for Planning and monitoring timely execution of transmission projects in the Maharashtra State including Mumbai area.
- f) ‘Commission’ means Maharashtra Electricity Regulatory Commission.
- g) ‘Committee’ means the –Grid coordination Committee constituted under para 5 of the MEGC, 2020.
- h) ‘IEGC’ means the Indian Electricity Grid Code specified by Central Electricity Regulatory Commission.
- i) ‘Meeting’ means a meeting of the Committee or functional committee convened by the chairperson or any member authorized to convene a meeting in the absence of the chairperson.
- j) ‘Member’ means the member of the –GCC& functional committees formed as per MSEG, 2020 on establishment of GCC and as amended from time to time.



- k) 'Operational Coordination Committee (OCC)' means a functional committee constituted by the GCC. Which shall be responsible for the implementation of provisions of Operation Code and Scheduling and Despatch Code of MEGC.
- l) 'Protection Coordination committee (PCC)' means a functional committee constituted by the GCC. Which shall be responsible for Protection Coordination of InSTS and co-ordination with WRLDC
- m) 'Rule' means – Grid Coordination Committee (Conduct of Business) Rules 2020.
- n) 'Metering & communication Coordination committee (MCCC)' means a functional committees constituted by the GCC. Which shall be responsible for the implementation of provisions of Metering Code and Communication Code & related issues.
- o) 'Functional committee' means the Functional Committees constituted by GCC to guide and assist it in conducting the functions assigned to it.

2.2 The words and expressions used and not defined in these Rules shall be construed as having the same meaning as defined in the Act.

3. Chairperson of GCC:

As per para 5.4.2 of the MEGC, 2020, Director state transmission Utility (STU) shall be the chairperson of the GCC.

4. Functions of Grid Coordination Committee:

As per para 5 of the MEGC, 2020 GCC shall carry out following functions:-

- (I) Facilitating the implementation of these Regulations and procedures developed under these Regulations;
- (II) 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.
- (III) Review of the MEGC, in accordance with the provisions of these Regulations and propose amendments required if any to the Commission;
- (IV) Other matters as may be directed by the Commission from time to time.
- (V) GCC may invite any expert or professional as special invitee & may also recommend hiring of experts/professional services.

5. Furnishing of data / information to Member Convener of GCC.

- (I) The member convener shall provide the functional support/staff to the committee.
- (II) It shall be responsibility of the constituents to ensure that any data though not specifically asked for by the member convener, but which may be required for the specific responsibility / function assigned to the GCC is also made available to the member convener.



CHAPTER II

PROCEDURE FOR CONDUCTING GCC MEETINGS

6. Place and date of GCC Meeting

The place and date of the meeting will be decided by Member Convener, GCC in consultation with Chairperson, GCC.

- 6.1 Meeting will be hosted by the member organizations as per the roster prepared by Member Convener, GCC in consultation with the members of the GCC.

7. Notice for the Committee meetings and Agenda

- 7.1 Notice for the Committee meetings shall be issued by Member Convener at least 21 days in advance in consultation with Chairperson, GCC. In case of emergency meetings required to be conducted to carry out urgent business, notice of one week is to be given. The notice shall be circulated through mail and the copy of the same shall be made available on STU/SLDC website.
- 7.2 The Agenda points for the meeting shall be sent to the Member Convener by the members at least 15 days in advance of the meeting. The Member Convener, in consultation with Chairperson, GCC shall finalize the agenda and circulate the same to all its members at least 7 days in advance through e-mail and also be posted on the STU/SLDC website.
- 7.3 Member Convener, GCC may also add any additional agenda involving urgent matters / policy issue directly in consultation with Chairperson, GCC.
- 7.4 Member Convener, GCC may convene a meeting on short notice on any urgent matter in consultation with Chairperson of the committee.

8. Effect of Non-receipt of Notice of Meeting by a Member

The non-receipt of notice by any member of GCC or sub-committee shall not invalidate the proceeding of the meeting or any decision taken in the meeting

9. Cancellation / re-scheduling of Meeting

If a meeting is required to be cancelled or rescheduled the same shall be intimated to the members at the earliest by telephone / Email and also posted in STU/SLDC website immediately.

10. Periodicity of meetings

The Committee members of core group shall meet at least once in Three months as per para-5.5 of Maharashtra Electricity Grid Code (MEGC) 2020. However, the Committee may meet to discuss any issue as and when required in consultation with Chairperson, GCC. The general body meeting of grid coordination conference shall be held at least once in a year.



11. Quorum of GCC Meeting

- 11.1 The Quorum of the meeting shall be 50 % of its members. If quorum is not fulfilled, the meeting will be adjourned. The same meeting will be held after 30 minutes.
- 11.2 All decision in the GCC shall be taken by consensus as far as possible or by majority votes of members present.
- 11.3 Only members of GCC will have the voting rights. In case the votes of the members present in favour of or against any proposal are equal, the Chairperson presiding over the meeting shall have a second vote or a deciding vote.
- 11.4 The decisions / ratifications made by the Committee during the meeting with the above quorum shall be treated as final.
- 11.5 The decision of the GCC arrived at shall be followed by the members subject to the directions or regulations of the MERC.
- 11.6 Only members of GCC shall participate in the Committee meeting. Other persons may attend the meeting by invitation / permission only.

12. Presiding Authority

- 12.1 The Chairperson, GCC shall preside over the meeting of GCC and conduct business. The Member Convener, GCC shall assist the Chairperson of GCC in conducting the meeting. If the Chairperson is unable to be present at the meeting for any reason, Member recommended by the Chairperson GCC shall preside over the meeting.
- 12.2 In the absence of Member Convener, GCC, such of the officer as may be designated by Chairperson/Presiding Authority, GCC shall function as Member Convener to assist Chairperson, GCC at that meeting.

13. Recording of the minutes

- 13.1 The Member Convenor, GCC in consultation with the Chairperson, GCC shall finalize and circulate the minutes of meeting to all its members within 15 working days from the date of the Committee Meeting. The minutes of the meeting shall also be posted on the website of STU/SLDC.

14. Confirmation of the Minutes

Minutes of the GCC meeting shall be placed in the next meeting for confirmation. However, in case of urgency the minutes may be confirmed by circulation.



CHAPTER III

FUNCTIONAL COMMITTEES OF GCC

15. Constitution of Functional Committees of GCC:

15.1 Following Functional Committees will be constituted under GCC to guide and assist it in conducting the functions assigned to it.

- a) Maharashtra Transmission Committee (MTC)
- b) Operation Coordination Committee (OCC)
- c) Protection Coordination Committee (PCC)
- d) Metering and Communication Coordination Committee (MCCC)

GCC or any Functional Committee may constitute task force, core group for specific purpose from among the members and external experts to advice on any specific issue.

Functions and Composition of Functional Committees of GCC

16. Maharashtra Transmission Committee (MTC):

The Committee shall be responsible for Planning and monitoring timely execution of transmission projects in the Maharashtra State including Mumbai area. The Committee shall also address the InSTS Connectivity related issues if referred by the GCC.

16.1 Functions:

MTC shall perform the following functions:

- 16.1.1 Coordinate system planning, maintenance schedule and contingency plan to ensure adequate transmission system planning;
- 16.1.2 Review of existing interconnection equipment for alteration, addition, if necessary, so as to comply with the Connection Conditions provided in the MEGC/IEGC;
- 16.1.3 Review the load estimate (long term) and the methodology and assumptions made by the Users;
- 16.1.4 Review and finalise the proposals identified on the basis of planning studies;
- 16.1.5 Prepare a report on the execution of various planning related activities and achievement of milestones on a six-monthly basis and submit to GCC;
- 16.1.6 Study and suggest projects to be implemented under Tariff Based Competitive Bidding (TBCB) to optimise the project cost;
- 16.1.7 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;
- 16.1.8 Monitor the transmission related projects under execution and analyse the reasons for delay if any with propose way forward; and
- 16.1.9 Any other function as directed by the GCC.

MTC shall also undertake scrutiny of Transmission system augmentation proposals prepared by Transmission Licensees 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.

16.2 Composition of Maharashtra Transmission Committee (MTC):

- 16.2.1 Chief Engineer, State Transmission Utility (STU) - Chairperson of MTC
- 16.2.2 Superintending Engineer, State Transmission Utility (STU) – Member Convener;
- 16.2.3 Chief Engineer (MSLDC) – Member;
- 16.2.4 Representative of State-Owned Transmission Licensees in the State – Member;
- 16.2.5 Representative of State-Owned Distribution Licensees in the State – Member;
- 16.2.6 Representative of State-Owned Generating Company - Member;
- 16.2.7 One Representative of Private Transmission Licensee having highest transmission network in Circuit-Km in the previous financial year – Member;
- 16.2.8 One Representative from each Mumbai Transmission Licensees– Member;
- 16.2.9 Representative of the Indian Railways in the State– Member;
- 16.2.10 One Representative from each Mumbai Distribution licensees– Member;

16.3 Meetings:

- 16.3.1 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.
- 16.3.2 MTC shall put up its recommendations in next meeting of the GCC.
- 16.3.3 MTC shall meet separately also as and when needed to address urgent issues or specific issues, if any.
- 16.3.4 The Chairperson of the MTC shall preside over the meeting. In case Chairperson is unable to be present, Member recommended by the Chairperson, MTC shall preside over the meeting.
- 17.3.1. MTC may invite any expert or professional as special invitee & may also recommend hiring of experts/professional services.

17. Operation Coordination Committee (OCC):

The Committee shall be responsible for the implementation of provisions of Operation Code and Scheduling and Despatch Code of MEGC.

17.1 Functions:

OCC shall perform the following functions:

- 17.1.1 Review and analyse the grid disturbances and system restoration procedure;
- 17.1.2 Review the reactive compensation mechanism for InSTS;



- 17.1.3 Review and finalize planned outage plan of STU (All the Transmission Licensees, Generating Companies);
- 17.1.4 Review the load curtailment mechanism;
- 17.1.5 Review the installation of Disturbance Recorders, Event Loggers, Under Frequency Relays (UFR), df/dt relays etc. in the InSTS;
- 17.1.6 Review and study the implementation of governor mode of operation for the generating stations in the State;
- 17.1.7 Review of Renewable Energy Curtailment and formulate means of avoiding/reducing it;
- 17.1.8 Review of Transmission Constraint cases noticed by SLDC and suggest the recommendations;
- 17.1.9 Monitoring compliance of various provisions of the CEA (Standards for Connectivity to the Grid) (Amendment) Regulations, 2019, viz. installation of LVRT/HVRT features, Flicker, Harmonic injection certifications, etc by the InSTS Generators including RE;
- 17.1.10 Review of violation of System Parameters, Grid indiscipline, ;
- 17.1.11 Review of Real time visibility of the network parameters(Analog & Digital signals);
- 17.1.12 Monitoring of compliance of mock-trials of Black-Start operations of Generators;
- 17.1.13 Review of Black-Start Operation procedures;
- 17.1.14 Review of Load Trimming Schemes (LTS);
- 17.1.15 Review of DC Demonstration tests carried out;
- 17.1.16 Provide feedback to GCC based on various issues observed and discussed in the OCC; and
- 17.1.17 Any other function as directed by the GCC.

17.2 Composition of Operation Coordination Committee (OCC):

- 17.2.1 Executive Director, State Load Despatch Center (SLDC) - Chairperson of OCC
- 17.2.2 Superintending Engineer (Operations), SLDC – member Convener;
- 17.2.3 Chief Engineer, State Load Despatch Center (SLDC) – Member;
- 17.2.4 Chief Engineer, State Transmission Utility (STU) – Member;
- 17.2.5 Representative of State-Owned Transmission Licensees in the State – Member;
- 17.2.6 Representative of State-Owned Distribution Licensees in the State – Member;
- 17.2.7 Representative of State-Owned Generating Company - Member;
- 17.2.8 One Representative from each Transmission Licensees in the State – Member;
- 17.2.9 One Representative from each Power generating companies in the State – Member;
- 17.2.10 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 rotation basis.)

17.3 Meetings:

- 17.3.2. OCC shall meet at least once every three months and coordinate on all technical aspects of system operation, load despatch and shall provide recommendations to the GCC.
- 17.3.3. OCC shall put up its recommendations in the next meeting of GCC.
- 17.3.4. OCC shall meet separately also as and when needed to address urgent issues or specific issues, if any.



17.3.5. The Chairperson of the OCC shall preside over the meeting. In case Chairperson is unable to be present, Member recommended by the Chairperson, OCC shall preside over the meeting.

17.3.6. OCC may invite any expert or professional as special invitee & may also recommend hiring of experts/professional services.

18. Protection Coordination Committee (PCC):

The Committee shall be responsible for Protection Coordination of InSTS and co-ordination with WRLDC as per the requirement.

18.1 Functions:

PCC shall perform the following functions:

- 18.1.1 Assist STU to prepare protection manual under Protection Code;
- 18.1.2 Ensure compliance of Protection Code;
- 18.1.3 Specify the minimum protection requirements for the User's system connected to the InSTS;
- 18.1.4 Deliberate and decide various protection settings, testing procedure and periodicity;
- 18.1.5 Review the requirement of upgradation of protection schemes and necessary switchgear equipment;
- 18.1.6 Analyse the failure of protection system in case of major grid disturbance and suggest modifications and alterations;
- 18.1.7 Review and analyse the grid disturbances during the three months period preceding PCC meeting;
- 18.1.8 Review the suggestion of Users for revision of protection code;
- 18.1.9 Monitor Protection Audit reports and compliances thereof; and
- 18.1.10 Any other function as directed by the GCC.

18.2 Composition of Protection Coordination Committee (PCC):

- 18.2.1 Chief Engineer (Protection) MSETCL/STU - Chairperson of PCC
- 18.2.2 Chief Engineer, (O&M), MSETCL- Member Convener;
- 18.2.3 Chief Engineer, State Transmission Utility (STU) – Member;
- 18.2.4 Chief Engineer (MSLDC) – Member;
- 18.2.5 Representative of State-Owned Transmission Licensees in the State – Member;
- 18.2.6 Representative of State-Owned Distribution Licensees in the State – Member;
- 18.2.7 Representative of State-Owned Generating Company - Member;
- 18.2.8 One Representative from each Transmission Licensees in the State – Member;
- 18.2.9 One Representative from each Power generating companies/IPP's in the State – Member;
- 18.2.10 Representative of Renewable Energy (RE) generators in the State; One member each from Wind, Solar, Bagasse & Small Hydro. (Representation of each RE generators in the state will be given on rotation basis.)



18.3 Meetings:

- 18.3.1. PCC shall meet at least once every three month and coordinate regarding the implementation of Protection Code to ensure that Users of InSTS discharge their obligations under the Protection Code.
- 18.3.2. PCC shall put up its recommendations in the next meeting of GCC.
- 18.3.3. PCC shall meet separately also as and when needed to address urgent issues or specific issues, if any.
- 18.3.4. The Chairperson of the PCC shall preside over the meeting. In case Chairperson is unable to be present, Member recommended by the Chairperson, PCC shall preside over the meeting.
- 17.3.7. PCC may invite any expert or professional as special invitee& may also recommend hiring of experts/professional services.

19. Metering and Communication Coordination Committee (MCCC):

The Committee shall be responsible for the implementation of provisions of Metering Code and Communication Code & related issues.

19.1 Functions:

MCCC shall perform the following functions:

- 19.1.1 Ensure compliance of Metering Code;
- 19.1.2 Review deviations in the existing CT and PTs/CVTs from the minimum specifications prescribed in Annexure-1 of MEGC and upgradation/ replacement of the same within one year from the date of notification of MEGC;
- 19.1.3 Deliberate and decide the issues related to metering and metering failure for DSM account and energy account;
- 19.1.4 Review correctness and efficacy of the assessment methodology used for Metering defects, data loss etc;
- 19.1.5 Deliberate and decide the issues related to communication aspects of AMR/MRI;
- 19.1.6 To issue guidance on the interpretation and implementation of the Metering Code.
- 19.1.7 Review and propose amendments in metering arrangement and metering code;
- 19.1.8 To publish recommendations for changes to the Metering Code for InSTS together with the reason for the change and any objection if applicable.
- 19.1.9 Periodic review of SCADA visibility of all Drawal & injection points; and
- 19.1.10 Any other function as directed by the GCC.

19.2 Composition of Metering and Communication Coordination Committee (MCCC):

MCCC shall have following members:

- 19.2.1 A Chairman from STU, who shall be Director (Operations) MSETCL/STU.



- 19.2.2 Chief Engineer (ACI) , MSETCL/STU - Member Convenor;
- 19.2.3 Executive Director/Chief Engineer, State Load Dispatch Center.
- 19.2.4 Five Representative from of Generating Companies/IPPs in State having maximum generation capacity.
- 19.2.5 One representative from each Transmission Licensee in the State.
- 19.2.6 One representative from each Distribution Licensee in the State.
- 19.2.7 Three representatives from Solar Power Producers having maximum power generation capacity.
- 19.2.8 Three representatives from Wind Power Producers having maximum power generation capacity.
- 19.2.9 Three representatives from Bagasse Co-gen Power Producers having maximum power generation capacity.
- 19.2.10 Two representatives from Hydro Power Producers having maximum power generation capacity.

19.3 Meetings:

- 19.3.1. 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.
- 19.3.2. MCCC shall put up its recommendations in the next meeting of GCC.
- 19.3.3. MCCC shall meet separately also as and when needed to address urgent issues or specific issues, if any.
- 19.3.4. The Chairperson of the MCCC shall preside over the meeting. In case Chairperson is unable to be present, Member recommended by the Chairperson, MCCC shall preside over the meeting.
- 17.3.8. MCCC may invite any expert or professional as special invitee & may also recommend hiring of experts/professional services.



CHAPTER IV

PROCEDURE FOR CONDUCTING FUNCTIONAL COMMITTEE MEETINGS OF GCC

20. Conducting of Functional Committee Meetings, issue of Notice, Agenda & its Minutes

- 20.1 Notice for the Committee meetings shall be issued by Member Convener at least 21 days in advance for MCCC & MTC meeting & 15 days in advance for OCC & PCC meeting in consultation with Chairperson, Functional Committee. In case of emergency meetings required to be conducted to carry out urgent business, notice of one week is to be given for all functional committees. The notice shall be circulated through mail and the copy of the same shall be made available on STU/SLDC website.

The Agenda points for the meeting shall be sent to the Member Convener by the members at least 15 days in advance for MCCC & MTC meeting & 7 days in advance for OCC & PCC meeting. The Member Convener, in consultation with Chairperson, Functional Committee shall finalize the agenda and circulate the same to all its members at least 7 days in advance for MCCC & MTC meeting & 3 days in advance for OCC & PCCC through e-mail and also be posted on the STU/SLDC website.

- 20.2 The meetings will be conducted at the place and venue as decided by Member Convener, Functional Committee in consultation with the Chairperson, Functional Committee.
- 20.3 Meeting may be hosted by the member organizations as decided by Member Convener, Functional Committee in consultation with the members of the functional committee. All the arrangements required for conducting the meeting shall be made by the host member organisation.
- 20.4 The Member Convenor, Functional Committee in consultation with the Chairperson, Functional Committee shall finalize and circulate the minutes of meeting to all its members within 15 working days from the date of the Committee Meeting. The minutes of the meeting shall also be posted on the website of STU/SLDC.
- 20.5 The decision of the Committee arrived at for smooth Operation of the Regional Grid and for other functions shall be implemented by the Constituents. In case the functional committee recommends the matter to the GCC, for further deliberation or decision, the same shall be referred by member convener, Functional committees to GCC.



CHAPTER V

21. REPORTS

The following reports shall be prepared and furnished by concerned Entity/Committee:

Sr. No.	Name of the Report	Responsible Entity	Report to be submitted to:	Periodicity
1	Report of GCC Meeting	SLDC	MERC/STU	Quarterly
2	Grid Code review	GCC	MERC	Yearly
3	Execution of planning related activities & milestone achievements	MTC	GCC/STU	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/STU	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	Half yearly
16	Operational feedback	SLDC	GCC/STU/CTU	Quarterly
17	Misdeclaration of DC	SLDC	GCC,OCC	Quarterly

All Stakeholders are responsible for submitting up-to-date reports/data in accordance with the provisions of the MEGC, 2020.



CHAPTER VI

Procedures to be prepared for implementation of MEGC, 2020

22. Saving of inherent Power of the GCC.

- 22.1 Nothing in these Rules shall bar the GCC from adopting in conformity with the Act a procedure that is at variance with provisions of these Rules, if the GCC in view of the special circumstances of a matter or class of matters deem it necessary or expedient to deal with such a matter or class of matters.
- 22.2 Nothing in these Rules shall expressly or by implication, bar the GCC to deal with any matter or exercise any power under the MEGC, 2020 for which no Rules have been framed and GCC may deal with such matters, and functions in a manner it thinks fit.

