

  RIGHT TO INFORMATION	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: ceslde@mahaslde.in
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Ref: MSLDC/TECH/OP/OCC/ No 0 0 9 3 2

Date: 25 MAY 2022

To,
As per mailing list.

Sub: MoM of the 3rd Operation Co-ordination Committee (OCC) meeting held on 02.05.2022 at 11:30 hrs through Video Conferencing.

Dear Sir,

In reference to the above subject, the 3rd meeting of Operational Co-ordination Committee (OCC) meeting was convened on 02.05.2022 at 11:30 hrs through Video Conferencing.

The MoM of the said meeting duly approved by the Chairman of OCC are attached herewith.

Submitted for information and further needful please.

Encl: As above.

Yours sincerely,


(Mahesh Bhagwat)
Superintending Engineer, MSLDC
(Member Convener of OCC)

Copy s.w.r.s. to:

1. The Director (Operations), MSETCL, Prakashganga, Mumbai.
2. The Executive Director, MSLDC, Airoli, Navi Mumbai.

To,
All OCC members as per list

Sr. No.	Name of Organization	Name of Nominee	Designation	Committee constituent	Contact No.	E-Mail ID
1	MSLDC	Shri. Shrikant Jaltare	ED	Chairperson	022-27301931	edmsebholding@gmail.com
2	MSETCL	Shri. Shrikant Rajurkar	ED	Member	9769509020	edtrans@mahatransco.in
3	MSLDC	Mrs. Juelee Wagh	CE	Member	9819241773	cesldc@mahatransco.in
4	STU	Shri. Sanjeev Bhole	CE	Member	9588401698	cestu@mahatransco.in
5	MSEDCL	Shri. Gopichand Ghodke	SE (LM) I/c	Member	7030250444	selmkalwa@gmail.com
6	MSPGCL	Shri. Eknath Moze	DyCE (Works)	Member	8879770737	cegw@mahatransco.in
7	TPCL	Shri. Kiran Desale	Head (Transmission)	Member	9223553342	desalekv@tatapower.com
		Shri. Milind Gole	Head (Grid Operation), PSCC	Member	9820868264	pssc@tatapower.com
8	AEML	Shri. Dilip Devasthale	Head O&M AEML Transmission	Member	9324180932	Dilip.Devasthale@adani.com
9	ATIL	Shri. Abhishek Kukreja	Associate Manager-O&M	Member	6359956492	Abhishek.kukreja@adani.com
10	MEGPTCL	Shri. Rakesh Bhalerao	Associate Manager-Business Development	Member	7045953823	Rakesh.bhalerao@adani.com
11	JPTL	Shri. Vaibhav Sansare	Associate Manager-Transmission	Member	9552577122	Vaibhav.sansare@jsw.in
12	APTCL	Shri. Rajiv Nimje	AGM	Member	9422308883	Rajiv.nimje@rattanindia.com
13	VIPL	VIPL representative		Member		
14	JSWEL	Shri. Harshal Joshi	Manager (OSTS Dept)	Member	9552577131	Harshal.joshi@jsw.in
15	ADTPS	Shri. Vijay Dalli	VP-Operations	Member	9325119741	Vijay.Dali@adani.com
16	RIPL	Shri. Amit Panchalwar	DGM	Member	9503229333	Amit.panchalwar@rattanindia.com
17	APML	Shri. Manoj Taunk	Associate VP-Protection & Metering	Member	9099005517	Manoj.Taunk@adani.com
		Shri. Akshay Mathur		Member	9870663062	Akkshayv.Mathur@adani.com

18	SWPGL	Shri. Dinesh Mewade	DGM	Member	7387007010	Dinesh.m@saiwardha.com
		Shri. Prabhjit Singh Samra	GM (BDG-Operations)	Member	9177025554	Bdg_operations@saiwardha.com
19	AA Energy, Nagpur	Shri. Chandramani Chahande		Member	9021347870	admin@aaenergyltd.com
20	Ambalika Sugar Pvt. Ltd., A'Nagar	Shri. V.M. Bhise	CE	Member (Co-Gen)	7720054906 9960921767	ambalikaelectrical@gmail.com
21	Arti Hydro Power Pvt. Ltd. Bhandara			Member (Small Hydro)		
22	Bajaj Finserv	Shri. Jitesh Kokate	Sr. manager (windmill project)	Member (Wind)	7757057406	jitesh.kokate@bajajfinserv.in
23	Avaada Energy Ltd	Shri. Dhiren Bhatt		Member (Solar)	9978922979	dhiren.bhatt@avaada.com
24	MSLDC	Shri. Mahesh Bhagwat	SE (OP)	Member-Convenor	9920499062	seoperationmslhc@gmail.com

**Minutes of the 3rd Operation Co-ordination Committee meeting
convened on 2nd May'2022 at 11:30 Hrs through V.C.**

In accordance with the provisions of the MEGC, 2020, the Grid Co-ordination Committee (GCC) in its 2nd meeting held on dated 08.01.2021 has constituted the Operational Co-ordination Committee (OCC). Accordingly, 1st & 2nd Meetings of OCC were convened on 12.05.2021 & 13.08.2021 respectively. Further, a special meeting was convened on 25.10.2021 for discussion & finalization of draft procedures developed by MSLDC as mandated in MEGC, 2020. The Minutes of the special meeting were circulated to all the members vide letter no. 2626 dated 23.11.2021.

The 3rd meeting of the committee, was convened on 02.05.2022 at 11:30 hrs through video conferencing. The Superintending Engineer (OP-MSLDC) & Member Convener of OCC, welcomed all the members and participants.

The Executive Director (MSLDC) & the Chairman of the OCC, welcomed all the members and in his introductory note elaborated important points such as Maharashtra System Grid Performance, Rise in demand to the tune of 29000MW, Shortage of power, Market volatility and Load curtailment during the peak summer due to shortage of resources. The Chairman of the OCC emphasized the important role of SLDC in coordination and support of other utilities for maintaining the Grid under such adverse conditions. He welcomed the support and coordination of utilities for achieving the maximum demand met during the peak season.

The list of participants is attached herewith as ANNEXURE – A.

The detailed Point-wise Discussions held during the meeting are as follows:

1. Item No. 1: Confirmation of Minutes of Meeting of the 2nd OCC Meeting convened on 13 August 2021 and special OCC meeting convened on 25 October 2021:

- The Superintending Engineer (OP-MSLDC) informed that on dated 02.09.2021 & 23.11.2021, the MoM of the 2nd & special OCC Meeting respectively were shared to all the members and requested to offer any comments on the same so as to confirm the MoM.

Since no comments received, OCC confirmed the MoM of both the meetings.

2. Item No. 2: Maharashtra system Grid performance for the period from January 2022 to March 2022:

and

3. Item no.3: System Disturbance in the Maharashtra Network for the period January 2022 to March 2022:

and

4. Item no: 4: Status of completion of ongoing schemes in Maharashtra:

The Chairman of OCC opined that the above Points No. 2, 3 & 4 are informative in nature and details have already been circulated to all the members. Hence, members can comment, if any.

The details are enclosed with this MoM as below for ready reference:

- *The MSLDC presentation consisting of detailed Grid performance parameters for the period of Jan'2022 to Mar'2022 is attached herewith as ANNEXURE – 1.*
- *The revised status of Reactors is attached as ANNEXURE – 2.*
- *The revised status of various Transmission Schemes is attached as ANNEXURE – 3.*

5. ITEM NO 6: - Discussion and finalization of Draft procedure formulated towards, “Procedure of work to be carried out across an inter-user boundary.”

- The Chief Engineer (STU) informed that as per Regulation No. 45.20 of MEGC 2020, STU has prepared a draft procedure for work to be carried out across an inter-user boundary. The draft procedure was uploaded on website for seeking comments/suggestions from various stake holders. However, no comments have been received on the said draft procedure. As per the provisions of the MEGC, 2020, the draft procedure is to be prepared in co-ordination with OCC and approved in the GCC for implementation. The C.E. (STU) requested OCC members to deliberate on the draft procedure.
- The Head (PSCC), TPC, has raised the query that whether this procedure is applicable for the network being owned by TPC or for Inter user boundary network like work between AEML & TPC and MSETCL area. Whether GCC approval for the procedure available with TPC for carrying out works in TPC’s internal network is required.
- In this respect, the Chief Engineer (STU) informed that as per the provisions of the MEGC, 2020, the procedure will be applicable for carrying out works across an inter-user boundary i.e. between MSETCL-TPC-AEML, etc.
- The Head (PSCC), TPC suggested that in “EHV and HV switching, earthing and safety document procedure” the word “MSETCL” needs to be replaced by “STU” as this procedure is applicable to all utilities in the State. All the members accepted the suggestions of TPC.

After due deliberations, the OCC recommends for submission of the “Draft Procedure of work to be carried out across an inter-user boundary” to GCC after incorporating the changes suggested.

6. Item No- 7 Operation of Khopoli Hydro Power Plant in Spinning Mode:

- The Member Convenor of OCC, informed that the High-Level Committee (HLC) was constituted by Hon’ble MERC for enquiry of the partial Grid failure in MMR & Mumbai area on dated 12.10.2020. The said committee has recommended MSLDC & TPC to study the possibility of operation of Khopoli Hydro Plant in spinning mode as per system requirement and deliberate the study results in OCC.

- Accordingly, a study group was constituted having representatives from MSLDC, TPC-G, MSPGCL (as an expert). This study group has analyzed all the aspects in the said matter and observed that due to typical hydro layout of Khopoli plant, it is not possible to operate the said plant in spinning mode as per system requirements. The Study group has submitted the report to the Executive Director (MSLDC).

The study report was deliberated in the meeting and OCC took a note that it is not possible to operate Khopoli Hydro plant in spinning mode as per System requirements due to hydro layout constraints of the plant.

7. Item No- 7 Discussion and finalization of Draft procedure formulated towards “Procedure for System Restoration during partial grid failure.”

- The Member Convenor of OCC informed that as per Regulation No. 28.2 of MEGC-2020, MSLDC has prepared draft “**Procedure for System Restoration during partial grid failure**”. The said procedure was published on MSLDC website for seeking Stakeholders’ comments/suggestions. Accordingly, comments/suggestions from MSEDCL, TPC & AEML have been received. The comments have been consolidated with MSLDC remarks.
- The Chairman of OCC requested to brief the comments received so that same can be discussed and finalized. Accordingly, the Member Convenor of OCC briefed all the comments & the details.

After due deliberations, the OCC finalized the replies on the comments received from various Stakeholders. It is further resolved that the OCC final comments will be included in the draft procedure to be submitted to GCC for approval. The comments received from Stakeholders’ & OCC ratification on the same are attached as ANNEXURE – 4.

8. Item No-8 Operation of Nodal Units attached to MSETCL:

- The Chief Engineer (MSLDC), informed that at all the zones of MSETCL in the State, Nodal Control Centers are operational which are acting as a Single Point contact for communications related to Load shedding, disturbances, data sharing, etc. However, due to new Staff set-up in MSETCL, the Nodal Control Center at Kalwa is not operational. Due to non-availability of Kalwa Nodal, it is getting difficult for MSLDC to pass on directions of distressed load shedding & collecting the data after implementation of the instructions. As such, communication is to be made with each & every Sub-Station under emergency conditions which is very time consuming. Hence, Nodal Control Centers needs to be made operational on priority.
- The Chairman of the OCC expressed deep concern & expressed displeasure as Nodal are the key contact centers in any system exigencies and requested the Executive Director (Operations), MSETCL, to look in to the issue and make nodal centers operational on priority basis. He further requested to take up the issue in the ensuing GCC meeting.
- The Executive Director (Operations), MSETCL expressed his opinion that the Nodal Centers should be made operational and take up the issue in GCC on priority.

OCC took a note of the same.

9. Operational /Transmission Constraint Issues:

- The Member Convenor of OCC, informed that in quarterly feedback report MSLDC has briefed the details of congestion points and requested to provide remedial actions on long term basis for relieving congestion in the network. He briefed some of the important elements wherein critical congestion is observed in day to day grid operations.
- Shri. D. K. Rokade, Advisor (STU) elaborated the remedial measures which are tabulated below:

Name of Element	Remark of MSLDC	Comments of STU
Ektuni 765KV /400KV 1500MVA ICT 1 /2	ICT loading around 1600-2100 MW and N-1 non-compliant	<i>In upcoming five years STU plan 3rd ICT will be provided to relieve the congestion and loading of ICT's.</i>
500kV HVDC Bipole	ATC/TCC reduction of state by WRLDC as HVDC is operating to the tune of 1300MW instead of 1500MW	<i>The proposal for procurement of CT having required capacity is in progress at Corporate Office level. Once the CT is replaced, HVDC can be operated with 1500 MW capacity thereby removing constraint.</i>
400kV Padghe ICTs are not N-1 compliant. Constraint of TBC Bus.	600MVA ICT outage not feasible as 315MVA ICT get overloaded. Transferring of 500/600MVA ICT to 220kV transfer bus is not possible due to constraint of TBC (Single Conductor).	<i>After completion of 400/220 kV Kudus S/s evacuation, 220 kV Wada S/s will be shifted on 400 kV Kudus and load relief will be obtained on 400/220 kV Padghe s/s by December 2022</i>
220kV Nashik – Babhaleshwar ckt 1/2	Source to Nashik city required, loaded lines 280MW each, when only one-unit at Nashik is running	<i>400kV Pimpalgaon S/s is proposed in STU plan which will be LILO on Aurangabad PG- Boisar PG line at Pimpalgaon. With the commissioning of this scheme, alternate source will be available for Nashik City thereby reducing the loading on these lines.</i>

The Chairman of OCC directed STU to resolve the constraints on priority.

10. Agenda from ADTPS:

10.1. Frequent VSE schedule to ADTPS:

The OCC opined that the issue is related to DSM and may be taken up in MSPC meeting.

10.2. Reduction in Active load due to high reactive power sharing of ADTPS generators:

- The representative of ADTPS informed that the reactive power sharing through the 220 kV Dahanu – Viraj line is on higher side. In peak hours the sharing of reactive power by Dahanu generators increases. Due to this high MVAr injection, the active power need to be reduced.
- The Superintending Engineer (OP), MSLDC informed that as per the provisions of MEGC, 2020, it is the responsibility of every generator to provide reactive power support to the Grid within its Capability Curve. As seen from the Capability Curve, it is observed that the reactive power injection provided by ADTPS units is within limits and there is no need to reduce active power.
- In this respect, the representative of ADTPS informed that the ADTPS units have been commissioned in 1995 and are old. Due to mechanical vibration issue in the Turbines, it is not possible to provide Reactive power support without reducing active power even within Capability curve.
- In this respect, the Chairman of OCC requested MSEDCL to collect reactive power requirement data in Boisar area. Further, the matter may be studied in detail by MSLDC in co-ordination with MSEDCL, STU & ADTPS. After detailed study, the matter may be taken up in the GCC if required.
- *All the OCC members agreed to the opinion of the Chairman of OCC.*

11. Agenda from AEML:

11.1. Preliminary Occurrence Report for Major Disturbance:

- The representative of AEML opined that whenever there is some Occurrence wherein load curtailment is imposed in Mumbai & MMR area, a Preliminary Occurrence report of such Disturbances including Load Curtailment, if any may be shared with all Stakeholders by MSLDC for information & analysis. As MSLDC is the central part of the Grid monitoring and other Stake holders are not aware about such disturbances.
- The Chief Engineer (MSLDC) stated that Occurrence report analysis is the responsibility assigned to Protection Co-ordination Committee (PCC).
- In this regard, the Chairman of the OCC, opined that the Preliminary Occurrence report is prepared by MSLDC immediately on the facts reported by the concerned Stake holders in real time. MSLDC is in no position to validate or check the correctness of the information. This report can be shared with concerned Stakeholders as a first information report and same shall not be used for drawing any inferences as it is subjected to corrections & modifications.

After due deliberations, OCC members agreed to the same.

11.2. Inter utility communication shall have mention of name of the Engineer along with Token No:

- The representative of AEML opined that while communication between Inter-utility, name of the Engineer working in the Control Room may be provided along with Token Number.
- The Superintending Engineer (OP), MSLDC informed that the practice of issuance of instructions through Token No./Code has been established by the MSLDC Control Room. Therefore, it is not required to mention the name of the MSLDC Control Room Engineer.
- The Head (PSCC), TPC, opined that the existing practice of communication along with Token No. may be continued and name of Engineer may not be required.

After due deliberations, OCC agreed to continue the present practice of issuance of Token No/Code.

11.3. Upon finalization by MSLDC, status of Outage proposals uploaded in portal (P/D/A) shall be automatically communicated through mail to respective utilities:

- The representative of AEML informed that whenever the outages are approved by MSLDC in advance, the other Utilities plan their System operation considering such outage plan. However, status of availing of these planned outages is not available to the Stake holders.
- The Superintending Engineer (OP), MSLDC informed that planned outages are available to all the Stake holders on day ahead basis. However, presently no provision is available for making the status of availing of such outages in real time. In this respect, the possibility will be explored.

After due deliberations, OCC requested the Chief Engineer (MSLDC) to carry out necessary modifications in the OMS so that real time information regarding availment of outages is visible to all the Stakeholders.

12. Agenda from TPC:

12.1. Planned Outages:

- The Head (Transmission), TPC informed that they are facing difficulties in planning outages in their Transmission System. Certain outages like outages at 220 KV Borivali, were required for transferring to new GIS. It was for strengthening the network conditions and to meet with 'N-1' contingencies; however, such outages were deferred, there by affecting reliability of network in summer. 220 KV bus outages at Trombay are long pending and are required to be availed to prevent undue tripping. These outages are also getting deferred. He further, suggested to arrange monthly outage meeting just like WRPC monthly Outage co- ordination meeting among all stakeholders for making a consolidated tentative Outage plan.
- The Chief Engineer (MSLDC) informed that outages in the Mumbai System are approved in advance, however, due to some forced outage proposals in the MMR or Mumbai area, these planned outages are deferred in real time. Further, it is observed that the Utilities are submitting outage proposal without validating the 'N-1' criteria at their own. Many times outages on same corridor or alternate corridors are proposed on same day. Hence, under such

conditions, it is getting difficult for SLDC to approve outages and defer other outages. In such case, the blame is kept over SLDC that our outages are not approved by SLDC in -spite of the fact that the Utilities are aware that SLDC can approve only one outage in a same or alternate corridor.

- In this regard, the Chairman of OCC opined that a Sub-Group under the aegis of OCC may be formed for discussions & finalization of outages in MMR & Mumbai area. This Sub-Group may meet on monthly basis under the Chairmanship of the Chief Engineer (MSLDC). There may be one representative from each utility viz. TPC, AEML, MSETCL & SLDC. The Superintending Engineer (OP), MSLDC may be the Member convenor of the said Sub-Group.

After due deliberations, the OCC agreed for formation of Sub-Group under the aegis of OCC for discussions & finalization of outages in MMR & Mumbai area on monthly basis. MSLDC shall prepare a detailed Procedure and Order in this matter.

12.2. Emergency Outages:

- The Head (Transmission), TPC informed that in case of emergency outages, MSLDC Control Room is taking long time for issuance of Code and approval of the outages. Such delay under emergency situations may result in to failure or severe damage to the elements/equipment on which emergency outage has been requested. Hence, there should be standard procedure for validation of the emergency situation so as to reduce time for approval of outages & taking shut down.
- In this respect, the Chief Engineer, MSLDC informed that in most of the cases, it is observed that planned activities are also proposed under emergency outages. This is becoming a regular practice. Hence, to assess the emergency, the MSLDC Control Room always seek additional information or raise queries.
- The Chief Engineer (MSLDC) informed that as per the IEGC & MEGC, any Utility is empowered to take any element/equipment out from the Grid in case there is danger to the equipment or to any person. Hence, under such conditions, the Utilities can take actions on their own with intimation to SLDC.

The OCC directed the Chief Engineer, MSLDC to issue a circular regarding emergency outages, data requirements for approval of the same and arrange a meeting of all the Utilities i.e. MSETCL (Kalwa, Panvel Circle), TPC, AEML etc. under the chairmanship of the Chief Engineer (SLDC) and also endeavor to restrict the Emergency Outages.

13. **Agenda from Sai Wardha Power Generation Private Limited:**

- Change of Interface Location Point
- DSM Metering
- G-T Interface Location Metering
- GMR Connectivity Issue

The OCC opined that above issues are DSM related, hence, may be taken up in the MSPC meeting or concern forum for resolution.

- Handing over of the Asset/ Transmission Lines:

OCC opined that the issue is related to MSETCL O&M & STU. Hence, the same may be taken up with STU.

14. **Agenda from Rattan India Power Limited, Amravati:**

- Request for early rectification of DSM bills in case of SLDCs DSM Software failure instances.
- Implementation of Late Payment Surcharge in line with provisions under DSM procedure approved by MERC.
- Request for development in SLDCs DSM Software.
- Request for provision of Settlement of Receivables / Payable in individual DSM / VSE account.

The OCC opined that above issues are DSM related, hence, may be taken up in the MSPC meeting or concern forum for resolution.

The meeting concluded with the vote of thanks to the chair.

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List of Participants for 3rd OCC meeting

Sr. No.	Name	Designation	
MSLDC			
1	Shri. Shrikant Jaltare	Executive Director	Chairman
2	Mrs. Juelee Wagh	Chief Engineer	Member
3	Shri. Mahesh Bhagwat	Superintending Engineer (OP)	Member-Convener
4	Shri. Madhav Pande	Executive Engineer (OP)	---
5	Shri. Dinesh Patil	Executive Engineer (OP)	---
STU			
5	Shri. D. K. Rokade	Advisor (STU)	---
MSETCL			
6	Shri. Rohidas Mhaske	E.D. (Trans)	Member
MSEDCL			
7	Shri. Gopichand Ghodke	S.E. (LM)	Member
TPCL			
8	Shri. P. Devanand	Head, PSCC	---
9	Shri. Milind Gole	Head, Grid Operations, PSCC	Member
10	Shri. Kiran Desale	Head (Transmission)	---
AEML			
11	Shri. Dilip Devasthale	Head, O&M Transmission	Member
12	Shri. Abaji Naralkar	Asst. V.P.	---
MEGPTCL			
13	Shri. Rakesh Bhalerao	Associate Manager BD	Member
JPTL			
14	Shri. Vaibhav Sansare	Assistant Manager-Transmission	Member
APTCL			
15	Shri. Rajie Nimje	AGM	Member
JSWEL			
16	Shri. Harshal Joshi	Manager (OSTS)	Member
ADTPS			
17	Shri. Vijay Dalli	VP-Operations	Member
RIPL			
18	Shri. Amit Panchalwar	DGM	Member

Annexure – 4

Discussions/Modification in the Clauses of Draft

Clause No.	Clause in Draft Procedure	Comments/Suggestions of Stakeholders	Discussions/Recommendations in OCC
Clause No. 1.2	<i>This procedure has been developed by STU in consultation with SLDC in compliance of Clause 28.2 and 43.2 of MEGC 2020.</i>	As per clause 28.2 of MEGC-2020, SLDC, in coordination with OCC, shall develop, document, and maintain detailed operating procedures for managing the InSTS. Clause need to be redrafted as below: This procedure has been developed by SLDC in co-ordination with OCC/GCC in compliance of Clause 28.2 and 43.2 of MEGC 2020.	Clause to be redrafted as: This procedure has been developed by SLDC in co-ordination with OCC/GCC in compliance of regulations 28.2 and 43.2 of MEGC 2020.
Clause No. 2.1	“Grid disturbance” means tripping of one or more power system elements of the grid like a generator, transmission line, transformer, shunt reactor, series capacitor and Static VAR Compensator, resulting in total failure of supply at a sub-station or loss of integrity of the grid, at the level of transmission system at 220 kV and above.	TPC/AEML: Majority network in Mumbai Area 110kV, so any disruption in 110kV is contributing major disturbances in Mumbai Grid. In grid disturbance 110kV network of Mumbai may be considered.	All the OCC members opined that 100 kV level only in MMR may be included however, the issue may be put forth before the ensuing GCC for finalization.
Clause No. 2.2	“Grid incident” means tripping of one or more power system elements of the grid like a generator, transmission line, transformer, shunt reactor, series capacitor and Static VAR Compensator, which requires re-scheduling of generation or load, without total loss of supply at a sub-station or loss of integrity of the grid at 220 kV and above.	STU: In North Eastern states 110kV network is considered on the same line it may be applied to MMR region.	
	Market Suspension by MSLDC		<i>This committee has ratified that the matter will be referred to GCC for further discussion and approval</i>
Clause No.2.4	FIDVR:- Fault induced Dynamic voltage recovery problems encountered while restoring	MSEDCL commented that this requires shedding of Inductive loads & switching ON of capacitive banks	<i>OCC members accepted the suggestion given and recommended to append the</i>

	<p>the induction motor loads following the fault clearance. Due to Thermostat loads (Air conditions & refrigerators etc.), voltage dip again and voltage collapse occurs. This requires shedding of loads by sensing under voltage.</p>	<p>by sensing under voltage.</p>	<p><i>definition of FIDVR</i></p>
<p>Clause No.4.1</p>	<p><i>As per CEA regulations on Grid standards 2010, the Categorization of grid incidents and grid disturbance based on severity as follows. Categorization of grid incidents in increasing order of severity, -</i> <i>Category GI-1 - Tripping of one or more power system elements of the grid like a generator, transmission line, transformer, shunt reactor, series capacitor and Static VAR Compensator, which requires re-scheduling of generation or load, without total loss of supply at a sub-station or loss of integrity of the grid at 220 kV (132 kV in the case of North-Eastern Region);</i> <i>Category GI-2 - Tripping of one or more power system elements of the grid like a generator, transmission line, transformer, shunt reactor, series capacitor and Static VAR Compensator, which requires re-scheduling of generation or load, without total loss of supply at a sub-station or loss of integrity of the grid at 400 kV and above (220 kV and above in the case of North-Eastern Region).</i></p>	<p><i>MSLDC comments on the Definitions of grid Incidents and grid disturbances given as per Grid Standards published by CEA. The corrective actions to be taken including restoration of loads and reporting procedures given in sections 5 to 9. However, the actions to be taken or not given category wise as the actions required overlapped in different categories.</i> <i>The recovery procedures for Total system black out are separately developed and being uploaded for comments.</i></p>	<p><i>OCC Members accepted the say of MSLDC.</i></p>
<p>Clause No. 5.4</p>	<p><i>As per the provision of these Regulations MEGC, 2020 or IEGC, in case of any grid disturbance, the scheduled generation of all the generating stations and scheduled drawl of all the beneficiaries shall be deemed to have been revised to be equal to their actual generation/drawl for all the time blocks affected by the grid disturbance. As per MERC State Grid Code Regulations, 2020 53.2.6,</i></p>	<p>MSLDC clarified that after accessing the severity and extent of partial grid disturbance, MSLDC declares suspension of DSM Mechanism. The schedules are equal to actuals in injection/drawl schedules post factor. As far as operation requirement is concerned</p>	<p><i>OCC Members accepted the say of MSLDC.</i></p>

	<p><i>duration and certification of such grid disturbance would be declared by WRLDC or SLDC as the case may be. A notice to this effect shall be posted at RLDC/SLDC website. The issue of notice at RLDC/SLDC website shall be considered as declaration of disturbance by RLDC/SLDC. All state entity shall take note of the disturbance & take appropriate action at their end. Provided, that, in case of partial backing down or loss of identified Unit due to operation of Special Protection Scheme (SPS), the declared capacity (D.C.) shall be deemed available for the event period as declared by SLDC.</i></p>	<p><i>MSLDC shall co-ordinate with the state constituents in real time. Timelines for submission/publishing the grid disturbance report by MSLDC is generally 24Hrs.</i></p>	
<p><i>Clause 5.5</i></p>	<p><i>If only one substation or one InSGS is affected, the schedules would not be suspended but only revised.</i></p>	<p><i>AEML submitted the view</i> <i>(1) In high load density area the load catered by one substation would be large and load impacted would be very huge. For example for AEML, 220 kV Aarey Substation supply ~ 375 MW load which is >20% of AEML system load. Therefore, the GD & its treatment should be linked to % load of respective DISCOM as the number of Stations affected criteria will not be appropriate/logical. This will impact hugely to DISCOMs having lower demand.</i> <i>(2) Similarly some Substations would be catering to very low load , hence criteria for applicability of Cl. 5.4 shall be based on threshold quantum (%) of load affected w.r.t to its total load considering respective Demand of respective DISCOM.</i> <i>(3) Similarly for Generation tripping on account of Transmission events, if more than 1 unit trips same should qualify as GD/GI treatment under Clause 5.4</i></p> <p><i>MSLDC clarified that If more than 1 Generating unit trips or load greater than 2% of respective DISCOM schedule is affected then only grid disturbance criteria under 5.4 will be applicable else only revision in schedules will be undertaken.</i></p>	<p><i>The Executive Director (MSLDC), the Chairman of the OCC opined that categorization of loads will be done in real time and financial treatment in DSM will be decided as per DSM procedure.</i></p> <p><i>All the OCC Members accepted the opinion of the Chairman of OCC.</i></p>

		<p><i>Suspension of DSM to be done on case to case basis by MSLDC. In case of separation of Mumbai or part of Mumbai from national grid / state grid, DSM Mechanism for Mumbai shall be suspended while DSM Mechanism would be functional in rest of Maharashtra. In case of grid disturbance/split of Maharashtra state from national grid, DSM Mechanism shall be suspended in the entire state.</i></p>	
<p>Clause 5.6</p>	<p><i>Curtailment shall be done by MSLDC, in case of transmission constraints or congestion in InSTS, When for the reason of transmission constraints e.g., congestion or in the interest of grid security, it becomes necessary to curtail power flow on a transmission corridor, the transactions already scheduled may be curtailed by SLDC. The short-term Open Access transactions shall be curtailed first followed by the medium-term Open Access transactions, followed by the long-term access transactions and amongst the consumers of a particular category, curtailment shall be carried out on pro rata basis shall be as per the MERC TOA/DOA Regulations.</i></p>	<p>MSEDCL: It is suggested that during the congestion or transmission constraints or in the interest of grid security period, SLDC does not allow buyers, whom will further increase the congestion/constraints in the system, to purchase power through RTM market in real time. MSLDC stated that as per CERC Regulations, already scheduled RTM transactions shall not be curtailed. After the declaration of congestion/Transmission constraints by MSLDC, the buyers on the importing side of congested corridors/interfaces shall be barred from buying in RTM as congestion would further worsen. All other transactions other than RTM shall be curtailed as per requirement & the priority indicated. After declaration of congestion, buyers participating in RTM bidding shall be violating this procedure and non-compliance will be taken up accordingly. AEML: Loadshedding shall be the last resort after exploring all possible avenues. Curtailment shall be done by MSLDC, in case of transmission constraints or congestion in InSTS, when for the reason of transmission constraints e.g., congestion or in the interest of grid security, it becomes necessary to curtail power flow on a transmission corridor, the transactions already scheduled may be curtailed by SLDC after taking all possible measures like increasing embedded generation etc. The short-term Open Access transactions shall be</p>	<p><i>All the OCC Members noted to modify the Clause as requested.</i></p>

		<p>curtailed first followed by the medium-term Open Access transactions, followed by the long-term Open Access transactions and amongst the consumers of a particular category, curtailment shall be carried out on pro rata basis shall be as per the MERC TOA/DOA Regulations.</p> <p>TPC submitted that curtailment shall be done on DISCOM's Drawl.</p> <p><i>MSLDC agreed clause will be modified accordingly.</i></p>	
Clause 6.3	<p>Priority would be accorded for extending supply to Railway tractions and installations where safety is of paramount important such as nuclear power stations.</p>	<p>TPC submitted that Priority for extending supply to Railways in case of partial grid failure / islanding would result in large variations in frequency and voltage.</p> <p>In case of islanding of some area of network, extending supply to Railways would cause severe voltage fluctuations and also large frequency variations due to Railway single phase unbalanced load. Hence dynamic study needs to be carried out for studying effect of Single-phase Railway load in case of Islanding</p> <p>AEML commented that n present scenario Airport and Tele Communication installations are vital and are also of public importance, hence same may be considered in priority.</p> <p><i>MSLDC stated that comments from TPCL and AEML are appreciated and in order. All the loads classified under Super critical category in 'Protocol for Demand curtailment and restoration in MMR and Mumbai region' shall be included in the clause and accordingly shall be modified.</i></p>	<p><i>All the OCC Members noted to modify the Clause as requested.</i></p>
Clause 7.9	<p><i>While restoring Railway loads on say R-Y phase, some B phase load should also be restored to avoid unbalancing and avoid tripping of generators on negative phase sequence currents.</i></p>	<p>TPC submitted TPC submitted that Priority for extending supply to Railways in case of partial grid failure / islanding would result in large variations in frequency and voltage.</p> <p>In case of islanding of some area of network,</p>	<p><i>The Executive Director (MSLDC), the Chairman of the OCC opined that Railway as fluctuating load other load would be taken in services with railway load to dampen the voltage/frequency</i></p>

		<p>extending supply to Railways would cause severe voltage fluctuations and also large frequency variations due to Railway single phase unbalanced load. Hence dynamic study needs to be carried out for studying effect of Single phase Railway load in case of Islanding.</p> <p><i>MSLDC commented The typographical error of missing word/phrase is included and modified as below:</i></p> <p><i>'While restoring Railway loads on say R-Y phase, some B phase city/urban load should also be restored to avoid unbalancing and avoid tripping of generators on negative phase sequence currents. The comments from TPCL is appreciated and desirable to conduct studies. However, all the loads classified under Super critical category in 'Protocol for Demand curtailment and restoration in MMR and Mumbai region' shall be included in the clause 6.3 and accordingly shall be modified .</i></p>	<p><i>variations. (Super Critical/ Critical Load) which shall come to know from different types of studies which shall be carried out by utilities.</i></p> <p><i>All the OCC members noted the opinion of the Chairman of OCC.</i></p>
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