

MAHARASHTRA STATE ELECTRICITY TRANSMISSION CO.LTD.

CIN NO. U40109MH2005SGC153646

From:

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

To.

The Superintending Engineer,

EHV CC O&M Circle,

Akola/Amravati/Bhusawal/Aurangabad/Parli/

Pune/Solapur/Kalwa/Panvel/Chandrapur/

Nashik/ HVDC C'pur/HVDC

Padghe/Karad/Kolhapur/Nagpur

18 JUN 2018

Ref: MSLDC/TECH/CO/



Sub: - Important & other grid elements Outage proposal to MSLDC_Operational guidelines Thereof.

MSETCL transmission system is integrated with Inter State & Intra State transmission companies like PGCIL, BDTCL, MEGPTCL, ATIL, APTCL, TPCL, VIPL, R-Infra-T and APTCL etc. Complete power system in India is operating as single National Grid. Outage of any element in any part of the system has impact on loading of other related elements in an integrated system. Hence, any outage needs to be approved with due consideration to maintain system integrity and avoid corridor congestion in any part of the System at anytime.

Outage Management System Procedure:-

As per Indian Electricity Grid Code - 2010, outages of all 765 kV, HVDC, 400kV & Interstate elements and inter-state grid lines are to be approved by Western Regional Power Committee (WRPC), one month ahead basis.

Outages covered under this procedure

- 1) 765kV, HVDC, 400kV Lines and associate grid elements
- 2) 765 & 400kV ICTs
- 3) Interstate Lines of all voltage levels
- 4) 765 & 400KV Bus & Busbar protection
- 5) Single / Double ckts Auto Re-closure

All 765 KV, HVDC, 400kV Intrastate and inter-state grid lines are categorized by WRLDC as important grid elements, with exception, called as - Other Grid elements are those elements owned by STU and are less sensitive to parallel CTU elements. The list is prepared by WRLDC annually as per provision in IEGC -5.2(C). The exemption is awarded after discussion with SLDC. The latest list is published by WRLDC on 31-05-2018.

The category of outages for above are classified are below.

1) Emergency outages:-

Emergency outages like Hotspot, flashover of insulators, ICT/Transformer issues requiring immediate shutdown etc. are covered under this category. Important grid element outages, code from WRLDC is required in real time, while the other grid elements are cleared by SLDC. The outage proposals should be submitted along with relevant photos wherever possible etc to highlight the emergency condition.

2) Monthly Outages:-

For important grid elements, WRPC and WRLDC approval is required and other grid elements will be approved by SLDC itself. The outage for other grid elements more than <u>48 hrs</u> will be approved by WRPC. Important & other grid element list is being displayed on SLDC Website.

The outages for All 765 KV, HVDC, 400KV Intrastate and inter-state grid lines all 400kV & above elements, for the next Calendar month are to be submitted by the concerned SE, EHV O&M Circle to MSLDC before the last day of the previous month.MSLDC formulate a final list of the outages till 4th day of the current month and forward important grid elements list to WRPC on same day.

<u>For example</u>- Planned outages for the month of August'18 shall be submitted to MSLDC before 30^{th} June'18 and MSLDC will formulate a final list of the outages till 4^{th} July'18 and forward only list of important grid elements to WRPC.

After receipt of outage list from all constituents and all transmission companies in Western Region, WRPC prepares final list incorporating all outage proposals for final discussion during WRPC OCCM (Operation Co-Ordination Committee) forum and the outage list is approved. The list of deferred outages with due reasons like high loading patterns etc.

WRPC OCCM is held between 10th to 15th day of every month and chaired by Member Secretary, WRPC(Govt. Of India) for approval of all the outages proposed on month ahead basis.

A consolidated list of approved and deferred outages of Western region is sent to all SLDC. A list of approved outages is issued by WRPC every month after detail discussions based on system study among all members.

Before availing the approved outage, the officer concerned who has proposed the outage, has to confirm *three days* prior to actual date of outage (i.e. on D-3 basis) regarding their readiness to avail the same to MSLDC.

Based on the above inputs and real time system conditions MSLDC finalizes a final list on day ahead basis at 17:00 hrs.

Outage shall be permitted by WRLDC/SLDC depending on real time system condition. Outages under SLDC perview shall be given by SLDC with code.

3) Post Operation Co-ordination Committee (OCC) outages:-

Outages which are not taken in monthly proposal, like project related outages etc. can be approved by WRPC on five days prior to actual date of outage i.e. on D-5 basis.

The outage proposal shall be submitted to CE, MSLDC duly signed by Chief Engineer concerned mentioning the reasons of non consideration in the earlier OCC and urgency of carrying out the work seven days before the proposed outage date.

A signed proposal by Chief Engineer (SLDC) is sent to Member Secretary, WRPC (Govt. Of India) for approval. On the receipt of WRPC consent only, outage can be approved by WRLDC based on system condition. Priority is given to the OCC approved outages in comparison to the post OCC proposals, if the outage is in same corridor.

4) Annual Plan Outages:-

Annual Transmission lines and Generation unit outage plan is formulated by WRPC for entire region as per IEGC. All annual outages for next financial year shall be submitted to MSLDC by end of October by the CE, EHV PC O&M Zones. Annual plan is submitted to WRPC by 30th November. These outages are reviewed on monthly basis. Further, annual outage plan for forth coming financial year is being prepared by WRPC by December and review of planned outages is carried out on monthly basis during Operating Co-ordination Committee meetings.

The 220 KV Element outages are approved by SLDC. Proposals of the same should be received at SLDC on D-2 basis.

Requisite for submission of outage proposal

While proposing outage on any transmission elements for maintenance work, all works shall be carried out at both ends and associated line partners. All the outages shall be proposed by EHV (O&M) authority. Proper co-ordination between concerned authorities shall be observed for inter-circle and inter-zone lines.

All the Outages proposals to be sent to on email at msldcoutage@gmail.com only

As per MSETCL the target level of EHVAC system availability is 99.7 % and above. Therefore, it is felt necessary that all outages should be well structured and managed in an optimum manner so that duration of outage, mitigation of risk involved and interruption to consumers should be minimized.

All field officers are hereby requested to strictly follow the procedure of outage planning for smooth working of Power System grid and enhancing the monthly as well as annual availability.

All feasible outages processed through the procedure shall be approved by SLDC with utmost efforts.

(Anit V. Kolap) Chief Engineer SLDC, Kalwa

Copy s.w.r.t:-

The Director (Operations/Projects), MSETCL, C.O., Mumbai

Copy f.w.c.s to:

The Chief Engineer (Trans O & M), MSETCL, C.O. Mumbai The Chief Engineer (EHV CC O&M Zone), MSETCL, Amravati/Aurangabad/Karad/Nagpur/Nasik/Pune/Vashi.

Copy to

The Superintending Engineer (ALDC), Ambazari, Nagpur.