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Consulting Electrical Engineers Association of Maharashtra

HAPPY MONSOON

CEEAMA E-NEWS

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From the Secretary's Desk

Dear All,

First of all, I wish all a Happy Monsoon!!

In July everywhere, it is green. The rain at its peak. Everybody is planning a rainy season picnic to get drenched in the rain and enjoy the atmosphere.

From this edition useful circular of MSEDCL will be printed for members to store and use in practice. I appeal to all to suggest four topics for member knowledge up-gradation. After the monsoon is over CEEAMA is planning to conduct such programme for the Engineers/supervisors/electrician/wireman working with electrical consultant/electrical contractor. It will be a group of 25 persons of similar category. The details will be shared to all for participation. CEEAMA intents to have programme for senior consultants also. It will be in the area of Electrical safety and security in projects.

I appeal all to share difficulties faced due to MSEDCL or PWD rules and regulations implemented in practice. CEEAMA will take up such issues and will discuss with relevant authorities for ease of operation and work.

Hope everybody is aware that CEEAMA forth coming exhibition is planned in the month of Feb 2019. All the details are shared with the member. I request all members to participate actively and make this exhibition a success as before. I appeal all to use your good offices to pursue the vendor to participate in the exhibition.

All the suggestions of programmes and other activities of CEEAMA shall reach to Secretary, President or any of our director. These suggestions will be discussed in forth coming AGM meeting and an appropriate decision will be taken.

I appeal all our active consultants to read the SOP i.e. Standard of Performance adopted by MSEDCL and same is available on MSEDCL web site and give their feedback, which we will take up with appropriate authorities.

Suhas Keskar.
Hon. Secretary.
CEEAMA

In This Issue...

Whats New

EcoStruxure architecture by Schneider Electric

Our planet faces an energy dilemma, the way we currently manage energy is unsustainable.

Three megatrends are provoking a huge increase in energy demand. By 2050, the world's cities will be home to an additional 2.5 billion people, another 50 billion devices and "things" will be connected to the internet within five year and industrial energy use will increase by at least 50% over the next 35 years. Today we still depend on unsustainable CO2-emitting fuels for 85% of our energy, trapping as much heat in the atmosphere as exploding 400,000 Hiroshima atomic bombs per day, 365 days a year.

So, we are facing an energy dilemma: consumption will grow by 50% at the same time we must cut our CO2 emissions in half. The only possible solution is to become 3X more efficient.

However, from now until 2035, two-thirds of the economic potential to improve energy efficiency remains untapped.

Schneider Electric ensures energy is on by making it safe, reliable, efficient, connected and sustainable.

They believe that two transformational developments will enable to meet the efficiency challenge: the convergence of Operational Technology (OT) and Information Technology (IT), accelerated by the Internet of Things (IoT), and the emergence of Smart Grid technology that propels a new world of energy that is more "3D + E." which is

- More electric.
- More digitized
- More decarbonized.
- More decentralized

Schneider Electric is uniquely positioned to take advantage of the convergence of IT and OT. Their connected "smart" technology can automatically measure, monitor, and control energy consumption and demand. The automation and energy coupled with software and analytics—through groundbreaking EcoStruxure architecture—you get an unprecedented level of operational intelligence to make better, more predictive decisions in real time. This is the foundational solution for their four key markets (Industry, Infrastructure, Buildings & Residential, and Data Centers & Networks) that consume 70% of the world's energy.

They integrate smart, connected technology into all devices—drives, UPS, energy storage, circuit breakers, LV panels, MV switchgear, remote terminal units—so they are capable of digitally transmitting data.

With Edge control they overlay this connectivity with powerful technology—hardware and software—to make critical real-time automation and control decisions at a very local, operational level. Building management software provides a unified, holistic view of all power and mechanical systems; smart machines and PLCs are designed with built-in Ethernet; and micro grid control integrates distributed energy resources.

Apps, analytics & services are enterprise-level software, applications and analytics take the resulting consolidated/aggregated data and turn it into data-driven operational intelligence.
https://download.schneider-electric.com/files?p_enDocType=Brochure&p_File_Name=Innovation_at_Every_Level_.pdf&p_Doc_Ref=Innovation_at_Every_Level

Contributed By Mangesh Shirgaonkar

Article

Operation of Switchgear under extreme operating conditions.

As Industries have grown, the world has started shrinking. We are now entering the era of Global Village. Areas once considered inhospitable are now turning into neo-modern industrial hubs. Hence, all electrical equipments are now expected to operate under extreme ambient temperatures.

The Electrical standards define certain conditions as standard and all switchgear are expected to operate at their rated capacities in those limits. IEC 60947 defines following parameters.

Temperature: **-5 to 40 deg C**

Altitude: **Less than 1000m above sea level**

Let us try and understand effects of extreme ambient conditions on switchgear performance.

High Temperature: The insulation for switchgear is subject to thermal stresses. A lot of heat is generated inside a switchboard due to heat generated by copper-work and cabling as well as eddy currents and magnetic losses.

A LV switchgear accommodates a number of devices in a configuration that relates to the scheme requirements. The enclosure and compartments within it provide the operating environment for each device.

At a specified ambient, the temperature rise is limited by insulation classes. Hence, as ambient temperature rises, temp. rise allowed decreases. Hence, the switchgear has to be derated to achieve permissible temp. rise .

High altitude: As we know, switchboards use air as a cooling medium. As the altitude increases, air becomes rarer and cannot provide the same cooling effect. It is also true that the ambient temperature would reduce as we keep going at higher altitudes. However, the net effect would be increase in equipment temperature. eg: If the increase in temperature because of less air is 5 deg. C, the decrease in ambient temperature would be only 2 Deg. C and hence the resultant effect would be an increase of 3 Deg. C. For Electrical equipments, this elevated temperature beyond the design limits may lead to insulation failure, increase in losses etc.

Due to the lower air density and heat transfer capacity at elevated altitudes, the physical properties such as dielectric strength, tripping characteristics of thermal relays etc may also require modification to reflect these changes. The derating needs to be designed as per Paschen's Law (the breakdown voltage is a function of the product of pressure and the gap length between two electrodes)

Low Temperature: All metal conductors lose their ductility and undergo a change in crystalline structure at Sub-zero temperatures . They become brittle and reliability decreases significantly at very low temperatures. Similarly plastic components in the panels and switchgear start losing shape at sub zero temperatures . Lubricants like grease tend to get hard as temperature gets lower .

All these factors lead to performance deterioration at subzero temperatures .

Sr. No	Parameter	Effects on System
1	High Temperature	Softening of Busbar and Contacts
		Reduction of Switchgear life
		Deterioration of Support Insulators
		Insulation failure for Switchgear
2	High Altitude	Insulation breakdown at even small over-voltage
		Less effective cooling in Panels
3	Low Temperature	Conductors become brittle
		Plastic parts become too hard
		Lubricants freeze
		High eddy currents due to less conductor resistance

The question that now arises is how we can tackle the adverse conditions to ensure a smooth operation. Using following methods a standard environment can be maintained inside the switchboards.

Forced cooling: This has to be used in case high temperature conditions if derating is not permissible. By using fans and louvers, ventilation can be improved to limit temperature rise. Space heating: Space heaters perform a dual task of tackling high humidity as well as low temperature. Anti condensation heating will ensure standard operating environment inside the switchboard. Protected Installation: By providing a high degree of protection like IP65, we can have strong resistance against wind, snow and precipitations. By using anti-corrosive methods, we can cover a wide range of protection.

Please note that the above limits as well as methods suggested are only guidelines .With improved engineering, manufacturers are extending their operating ranges and new methods are being developed to tackle the adverse conditions.

Prepared by:
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V L Engineers, Miraj.

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No. ED (Dist-II)/HT-Conn/Metering/ No 15940 **Date:** 29 JUN 2017

COMMERCIAL CIRCULAR No. 291

Sub: Revised-delegation of powers in respect of Load sanction, Estimate sanction, Inspection of HT consumer installation, fixing of point of supply, approval of SLD and metering specification thereof & Procedure for release of new HT Connections.

Ref: 1) Commercial Circular No. 225 dt. 05.07.2014
2) Commercial Circular No. 280 dt. 04.02.2017
3) Circular issued vide letter No. 21194 dt. 21.7.2006

During the day-to-day work and feedback from consumers of different areas of Maharashtra, it is observed that new connections of HT consumers are being delayed due to unnecessary movement of files and approvals at multiple levels. Specific directives are already given for releasing connections in a shorter period than the provisions of MERC SoP Regulations. From sample study of a new connection case, it appears that there are unnecessary movements of sanction proposal from different offices, and also unnecessary approval (formal/informal) processes in some offices.

Therefore it has become necessary to shorten the procedure for release of new connections and instruct field officers to release the new connections within the stipulated time.

This circular supersedes Commercial Circular No. 225 & 280 regarding load and administrative (financial limit) Sanctions.

The Authority for load sanction & estimate sanction as per the revised delegated powers are as below.

Delegation of Power for estimate sanction

	Power for sanctioning/releasing load			Existing power for sanctioning/releasing load
	Authority	Existing	Revised	Estimate Amount
-1-	-2-	-3-	-4-	-5-
01	SDO	Upto 20 HP*	No change	Rs. 5 Lakhs
01	E.Es of O&M Divisions	Loads upto and inclusive of 107 HP* in all areas except in Municipal Corporation areas where such limit would be 201 HP*. Inclusive of existing load/demand, if any.	No change	Rs. 25 Lakhs

02	S.Es. of O&M Circles	To sanction and release of loads to all installations with Contract Demand above 107 HP upto1500 KVA. Inclusive of existing load/demand, if any.	CD above 107 HP* & upto 3000 KVA* on Non-Express Feeder & CD above 107 HP* upto 5000 KVA* on Express Feeder(All Area) & in MMR	Full Powers
03	S.Es. of O&M Circles in consultation with concern C.E. EHV (O&M) of MSETCL	To sanction and release of loads to all installations with Contract Demand above 5 MVA without any upper limit.	CD above 3000 KVA* on Non-Express Feeder & CD above 5000 KVA* on Express Feeder(All Area) & in MMR without any upper limit	Full Powers
04	Director (Operations) in consultation with Executive Director (Dist.) and Executive Director (Projects) MSETCL	To sanction and release of loads to all installations with Contract Demand above 5 MVA without any upper limit.	To sanction start up power, load of Open Access Consumer & all the loads where prescribed voltage level corresponding to the Contract Demand is not being maintained	Full Powers

***Provided that the supply is extended on prescribed voltage level as per MERC Regulations-2014(SoP)**

Note:

1. All cases beyond SoP voltage level will be sanctioned by HO only.
2. If any proposal is not processed by Circle office within the stipulated time limit as per MERC SoP Regulations, the concerned R.D./C.E. shall initiate disciplinary action against the defaulter as per Service Regulation.
3. All the apartments/ flat schemes/gated colonies will be treated as one group. Technical and administrative (financial) sanction in those cases shall be given as one connection calculating total load of complex as per Circular No. CE/Dist/D-III/Req. of Land 28792 dtd. 17.07.2015.
4. Audit to be done at the sanctioning level authority only. These sanction powers are to be executed by the concerned authority in consultation with the concerned F & A Officers. Audits at multiple levels must be avoided.
5. Since both load sanction and technical estimate sanctions are clubbed, all load sanction and technical stimate sanction will be sanctioned as one sanction only.
6. Concerned authority to sanction load & technical estimate only if both load sanction and technical estimate sanction conditions are fulfilled. Otherwise both load sanction and technical estimate sanction is to be sent to concerned higher authority for sanction. No estimate in part will be sanctioned at lower level.

Example:

1. The estimate is for load of 95 hp (which is in limit of EE) but the amount is more than 25 Lakhs (in the power of SE), in this case this estimate will be sanctioned by SE (both load sanction and technical estimate).
2. The estimate is for load of 300 hp (which is in limit of SE) but the amount is 20 Lakhs (in the power of EE), in this case this estimate will be sanctioned by SE (both load sanction and technical estimate).

(B) **Inspection of HT consumer installation, fixing of point of supply, approval of SLD and metering specification**

The authority for Inspection of HT consumer installation, fixing of point of supply, approval of SLD and metering specification are revised as follows which will supersedes the Circular No. 21194 Dtd 21/07/2006.

Revised-delegation of powers in respect of Inspection of HT consumer installation, fixing of point of supply, approval of SLD and metering specification thereof.

Sr. No.	Particulars	Existing Delegation Of Powers	Revised Delegation Of Powers
1	For HT Consumers having Contract Demand (C.D.) upto 1000KVA	E.E.(Testing) and E.E.(O&M)	No Change
2	For HT Consumers having C.D. above 1000KVA upto 5000KVA	S.E.(Testing) and S.E.(O&M)/C.E.	E.E.(Testing) and E.E.(O&M)
3	For HT consumers having C.D. above 5000KVA	S.E.(Testing)/C.E.(Testing) and S.E.(O&M)/Zonal C.E.	S.E.(Testing) and S.E.(O&M).
4	For all EHV level consumers irrespective of contract demand	S.E.(Testing)/C.E.(Testing) and S.E.(O&M)/Zonal C.E.	S.E.(Testing) and S.E.(O&M).

(C) **Metering Specification**

The metering specification in respect of HT/EHV consumers shall be as below which will supersedes the circular ref. no. CE/Testing/0.2S/HT metering/291 dated 30/09/2013.

Particulars		Approved Specification		
		Ratio	Class	Burden VA
HT Consumers Up to 1000 KVA with Compact Cubicle	**CT**	Commensurate with Contract Demand, Single Core, Single ratio(…/5A)	0.5 S	10
	PT	…KV/√3/110/√3	0.5	50
	HT TOD Meter	(-/5A),11KV/√3/110/√3	0.5S	……
HT Consumers above 1000 KVA to 5000kVA with Compact Cubicle for Main and identical additional Check metering.	**CT**	Commensurate with Contract Demand, Single Core, Single ratio(…/5A)	0.2 S	10
	PT	…KV/√3/110/√3	0.2	50
	HT TOD Meter	(-/5A),11KV/√3/110/√3	0.2S	……
Open Assess Consumers with compact cubicle upto 33KV & outdoor type above 33KV, for Main and identical additional Check Metering	**CT**	Commensurate with Contract Demand, Single Core, Single ratio(…/5A) for HV & (…/1A) for EHV	0.2 S	15
	PT	…KV/√3/110/√3	0.2	50
	ABT, 4 quadrant, Import-Export type Meter	(-/5A)for HV or (-/1A) for EHV, 11KV/√3/110/√3	0.2S	……
Generation Projects(CPP/IPP/CO-gen/Solar etc) (With Outdoor type CT PT) for Main and identical additional Check metering	**CT**	Commensurate with Contract Demand, Single Core, Single ratio	0.2 S	15
	PT	…KV/√3/110/√3	0.2	50
	ABT, 4 quadrant, Import-Export type Meter	(-/1A),11KV/√3/110/√3	0.2S	……

EHV Consumers (outdoor type) for Main and identical additional Check metering	**CT**	Commensurate with Contract Demand, Single Core, Single ratio	0.2 S	15
	PT	...KV/√3/110/√3	0.2	50
	HT TOD Meter	(-/1A), 11KV/√3/110/√3	0.2S	.....

Note:- Metering CTs & PTs shall conform with the relevant IS and as per approved specs of MSEDCL(up to 33KV)/MSETCL(for EHV). Energy meter specifications shall confirm with MSEDCL latest approved specifications. The commensurate CT ratio shall be of standard ratio of 5/5A, 10/5A, 15/5A, 25/5 A, 50/5A, 75 /5A and 100/5A & their decimal multipliers. In case of EHV consumers while giving lower ratio CTs (below 25/1A) its availability be verified. The PT ratio in above table shall depend on the supply voltage level. Meter PT ratio as mentioned above i.e. 11KV/√3/110/√3 shall remain applicable for all voltage levels except 100KV (100KV/√3/110/√3) & 400KV (400KV/√3/110/√3). In case of supply with more than one feeder, summator meter be used. In case of Solar roof-top project bi-directional Net meter be provided as per MSEDCL specs as per MERC Net metering regulations 2015 & as amended. For CPP generators under REC scheme the metering specifications (CT, PT & Meter) for Generating Unit, Incomer of Auxiliary feeders & Incomer of self use feeders shall remain as mentioned in above table for generation projects. In case of open access consumer at generation end one meter be installed as per MSETCL specifications with same accuracy class. In case of express feeder at substation end metering specification should be identical as of consumer end metering specification for proper energy audit. Factory testing of all metering equipments be carried out before installation as per prevailing practice.

The detail specifications for CT/PT/Meter shall be as per the latest specifications available on MSEDCL website. For EHV consumers the outdoor metering CTs and PTs shall be as per MSETCL specifications.

The metering should be commensurate with the contract demand. The cases of CT error compensation factor & metering deviations cases in r/o HT/EHV consumers/ generators shall be submitted by S.E.(TQA) directly to H.O. to Chief Engineer (Dist/Testing) for approval. In all other cases it is reiterated that EE (Testing)/SE (TQA) will process the proposals directly to S.E. (O&M). The following guidelines be observed for release of connection-

1) Immediately after of the connection, the load test must be carried out and the load current in the meter should be cross-checked with the other meters available at consumer's end, sending end, receiving end and if required by alternative measurements in protection core of CT.s.
2) Two connections in one premise for same purpose are not allowed.
3) **Installation of Meter**:-The meter should be installed/fixed at eyesight level at proper place. The meter should be accessible for reading and inspection at any time.
4) **Access to Premises and Apparatus**:- The authorized employees of the MSEDCL are entitled by statute at all reasonable times, to enter upon the premises of the consumer to which energy is supplied for the purpose of inspection and reading meters and other maintenance works.
5) **Metering Shed for HT Connection**:- Compact metering Kiosks should be invariably provided for Metering purpose up to 33KV level. However, in case of consumers already in service with single phase CTs & PTs, the meters should be installed in a suitable cabin (to be provided by the consumers) below or very near the CTPT equipments in the yard. Metering kiosks should be provided in a proper spacious shed to carry out routine testing. It is further metering room or metering shed should be close to the entrance of the factory as far as possible, so that the reading can be taken even on the off-day of the factory. However, the selection of the location will also have to be decided from technical angle so that the VA drop in the metering cables is as minimum as possible and within prescribed limits.
6) **General Guidelines**:-
   TM4 form must be submitted along with copy of EE's/SE's permission letter and format of HT consumer inspection for release of new connection after inspection and compliance of following points.
   i) Except LIS consumer all HT consumers be provided with indoor type metering cubicle with commensurate CT/PT ratio.
   ii) Metering room or shade with minimum 15'x12' size with proper ventilation/lighting arrangement be provided for HT cubicle. One lighting plug point, fan, tube, light point be provided in metering room/shade to facilitate & routine testing work.
   iii) The point of supply should be got approved from SE/EE Testing and SE(O&M) / EE(O&M) jointly and must be close to main gate as far as possible and connected with good motor-able road. Technical estimates should be prepared only after finalization of Point of Supply.
   iv) Total 07 nos. of earth pits are required for HT metering cubical which needs to be meshed i.e. interconnected at bottom of each pit to get effective earth resistance. Same earth pits be connected separately by using copper strip of size 20 mm x 4 mm or copper round bar having equivalent current carrying capacity to following equipments.
   a) CT body and PT body- two pits

b) CT Secondary Earthing- One pit.
c) PT Secondary Earthing- One pit.
d) Incoming HT Cable Earthing- One pit.
e) Outgoing HT Cable Earthing- One pit.
f) Cubical Body Earthing- One pit.

Earthing strips should be visible and not be concealed in foundation and should have tap arrangement for watering the pits.

v) LA's on incoming DP for protecting HT cubical be considered while estimates. Please note that providing LAs on incoming line is must.

vi) Incoming HT cable be brought upto HT cubical through open cable trench same should not be buried in ground it should be visible for inspection.

vii) All holes including open near Inlet/Outlet of HT cable must be closed properly by using M.Seal/Epoxy compound or any other filling material.

viii) The consumer asked to install good quality static ammeter and voltmeter on LT side Incomer panel to record all three phase currents and voltages during annual testing and load test.

ix) HT cubical/CTs, PTs, TOD Meter must be got tested from testing divisions laboratory before installation. Date of Testing should be painted on equipments. Consumer Transformer testing shall be optional to the consumer. On consumer's request, concerned testing team shall test the transformer as per relevant IS (IS 1180). On national interest, consumer has to be used star rated transformer as per IS 1180.

x) Steel Industry/Foundry/IT/Paper or any other composite industry, where harmonics are generated such consumers must be asked to carry out study of harmonics measurements and submit test certificates to MSEDCL within 30 days after commissioning. Total Harmonic distortion should be within specified limits specified by MSEDCL. S.E.(O&M) shall issue notices to consumers in abnormal cases as per testing division's report. Further awareness about Harmonics & its effects needs to be done in consumers in order to maintain the quality supply.

xi) Details of consumer i.e. Contract Demand, Connected Load, Date of release, CTR/ PTR connected, MF etc be painted on front door of HT cubical .

xii) Except metering all other HT/LT line MSEDCL installations if available in consumers premises be shifted / removed before releasing the HT connection.

xiii) Door counters and kicks should be verified for their operations.

xiv) No. of connection HT or LT existing earlier in the same premises should be clubbed and only one point of supply should be released in one premises

xv) Checking of Meter Reading of Consumers on Express Feeder.

Monthly reading of the consumer who is fed through exclusive feeder should be cross checked with the meters on sending end & receiving end of the feeder & should also be verified with the protection given by the consumer. In case of any variations. the matter be specifically looked into & reasons for this variation be recorded supported with documents from the consumers i.e. Daily energy & maximum demand record & relevant data be maintained by the consumer.

xvi) CT PT Technical specifications shall be as per the guidelines given in above table of cl. (C).

- For metering suitable size of armoured copper cables (2.5/4mmsq) with multi-strand connections shall be used for both CT & PT circuits and CT PT units.
- No fuses will be provided anywhere in the P.T. circuit.
- Nut-bolts for cover plates of secondary terminal box of CT & PT as well as CT PT units should be tack welded/permanently secured with araldite after routine sealing certifying the connection at the time of release of supply.
- 33KV consumers should not be given supply by tapping line from 33KV substation instead of separate bay with breaker at substation and line from substation be proposed.
- Proposed 33KV & above level HT consumers should not be tapped to the HT line which is inter-connecting two HV substations.
- Point of supply be decided before finalizing estimates. Once the location of Point of supply is finalized and fixed, same should not be changed.
- The connection to be released with AMR facility duly installed in r/o HT consumers.

7) **Metering Maintenance:-**

Regular Meter testing of HT/ EHV consumers is carried out as under:

upto 1000kVA	Yearly
above 1000kVA to 3000kVA	Half yearly
Above 3000kVA	Quarterly

Similarly regular testing and maintenance of metering CT's and PT's are to be carried out as below and also as and when required:

Above 3000kVA---Yearly & Upto 3000kVA---- Bi-yearly

Moreover, Ratios and Tan-Delta of CTs & PTs of EHV consumers is to be measured during maintenance. To avoid CT saturation and billing problems, necessary action at O&M circle level needs to be initiated within provisions of MERC Tariff regulations. Further in such cases metering equipments especially CTs needs to be tested thoroughly by the concerned Testing Division.

(D) **The procedure of release of HT connections:-**

All the applications shall be processed online only. **The applicant shall apply online & any application processed offline will be treated as irregularity.**

Sr. No.	Procedure for sanction of new HT connections	Time allowed	Remarks
A) Process up to issuance of Firm Quotation.			
1	Receipt of A1 application online only to circle office along with proof of industry ownership and document showing ownership / lease of property, consent for 1.3 % DDF execution if necessary.	1 day	Same day
2	Feeding of A1 application (if not fed by applicant) to IT system and generation of consumer ID.	1day	Same day
3	Forwarding of A1 application and documents submitted by consumer to EE (T) /SE (TQA) and concern EE(O & M), SDO .	Day 1	Only in case load is above 5MVA, shall be referred to SE(TQA)
4	Joint Inspection by EE (O&M) and EE (Test) for Technical Feasibility and Point of Supply in co-ordination with concerned SDO/SO.	Day 2 & 3	Only in case load is above 5MVA, shall be referred to SE(TQA)
5	Forwarding of Metering specifications by EE (Test)/SE(TQA) to SE (O&M)	Day 4	Only in case load is above 5MVA, shall be referred to SE(TQA)
6	Preparation of detailed estimate and Technical Feasibility by Dy EE (HT) of Circle Office in consultation with concerned SDO or SO.	Day 4	-
7	Technical scrutiny by EE (ADM) and audit by Sr. Manager (F&A) of Circle Office.	Day 5	-
8	Put up of proposal for sanction of load and estimate by EE (ADM) and sanctioning by SE (O&M) and forwarding to all concerned.	Day 6	-
9	Generation of quotation / demand note by Dy EE (HT) of Circle Office and issuing to consumer.	Day 6	-
10	Permission to execute the work to the consumer by SE (O&M)	Same day he pays quotation / Demand note.	-

Process of sanction to be completed as per above schedule (Maximum) – within 6 days **B) Process after work execution :**			
11	Submission of WCR by SDO / SO after informing by consumer for completion of HT installation work. Issuing call to Electrical Inspector for permission.	Day 1	
12	Pre-commissioning Inspection and Testing of installation of consumers by EE (Test) / SE (TQA) and EE (O&M)	Within 2 days from the date of Work Completion	In case load is above 5MVA, shall be referred to SE(TQA)
13	Forwarding of Inspection and Testing report by EE (Test) / SE (TQA) to SE (O&M)	Next day after Testing and Inspection.	In case load is above 5MVA, shall be referred to SE(TQA)
14	Agreement and release of load by SE (O&M).	Within 2 days from receipt of report of EE (Test) / SE (TQA)	In case load is above 5MVA, shall be referred to SE(TQA)

The S.E. (O&M) will be authorized / responsible for compliance of above directions (including coordination with testing)

Note:-

- Other necessary documents which are not submitted by the consumer, along with A1 application shall be collected at the time of Agreement.

The revised procedure for release of HT connections shall be applicable with immediate effect. All field officers are therefore requested to take due note of the revised Procedure and follow the same hereafter.

The copy of circular is available on www.mahadiscom.in.

(S. D. SHINDE)
Executive Director (Dist-II)

Copy: As per mailing list