

CE/Testing/Spare/CTPT insp/Std. Guidelines/

No - 1507

Date:

20 JAN 2018

**CIRCULAR**

**Sub: Guidelines for keeping Spare Metering CTs & PTs in r/o EHV consumers/Generators.**

Ref: 1) O.N. No. CE/Testing/Spare/CTPT Insp/1639 dated 07/12/2017.

2) Pre-page No. CE/Testing/Spare/CTPT insp/21089 dated 01/01/2018.

This office is in receipt of letter from the Solar Power Generator M/s Orange Suvaan Energy Ltd, Dhule regarding permission for keeping spare metering CTs and PTs wherein it is requested for deputation of testing engineer for factory site inspection of the metering equipments.

As a general practice in MSEDCL we do not allow for spare CTs/PTs considering that these CTs/PTs may remain unutilized for a longer period which may result in insulation failure after commissioning, due to dust and moisture during storage period and also in view of tampering possibilities. Further, as per the EHV substation equipment failure report of CEA (Sept 2014), long storage period is not recommended and if required due to unavoidable situations then manufacturer's recommendation for storage should be followed strictly.

Moreover in MSEDCL we insist for Main and additional Check metering considering that if Main metering fails there will be additional metering as a Check. So there is no requirement for spare metering.

However, EHV Consumer's/Generator's view is that CT, PT is very critical and long lead item and generally takes 3-4 months for manufacturing and delivery at site. Also, in some cases they are getting penalized for long breakdowns (eg. SECI projects). So they wanted to keep spare of every item to minimize the breakdown and generation losses.

In view of above, the proposal was submitted to the competent authority for permission to keep spare metering CTs and metering PTs as per MSEDCL specifications for the project/plant in r/o of EHV consumer/Generator, as per their request.

In connection to the above, it is to inform that the competent authority has accorded approval for keeping spare metering CTs and PTs and its factory inspection & testing thereof in r/o EHV Consumers/Generators, as per their request and at their risk and cost and also subject to the following conditions:-

- 1) As per the request of EHV consumer/Generator the permission shall be granted by **concerned S.E.(TQA)** for allowing one set of spare EHV metering CTs(i.e. maximum 3nos) and one set of spare EHV metering PTs (i.e. maximum 3nos).
- 2) The permission shall be at the risk and cost of the Consumer/Generator. Further, in emergency these spare metering CTs and PTs shall be utilized only if these are as per MSEDCL standard at that time. Moreover, if there is failure of these equipments after commissioning after long storage period, MSEDCL shall not be responsible for the same.
- 3) The GTP, drawing and Type test of CT and PT should be got approved from MSETCL by the consumer before factory inspection.
- 4) The joint inspection of these spare metering equipments shall be carried out jointly by MSEDCL and MSETCL Testing Engineer at manufacturer's factory site. MSEDCL testing Engineer shall check testing parameters related to accuracy class however testing engineer from MSETCL may witness testing for system related parameters. After inspection and testing of the spare metering equipments at manufacturer's factory site, proper sealing shall

be done by concerned deputed Testing Engineer (preferably concerned EE Testing) and shall keep sealing record properly; The concerned E.E.(Testing) shall be responsible for the the same; Further shall carry out periodic inspection of stored metering equipments.

- 5) The Consumer/Generator shall be responsible to keep these spare equipments in proper condition. He shall ensure that the instrument transformers (CTs, PTs) shall be encapsulated in polyethylene covers to protect them from environmental effects such as rain-fall, dust, sand etc. (during transport and storage); It is recommended to follow manufacturer's instructions on proper storage and for periodic inspection, testing & maintenance (like oil testing, painting, tan-delta test, reconditioning etc); It is recommended to store these instrument transformers in their factory packed condition prior to installation.
- 6) These spare metering CTs and PTs shall remain in custody of the consumer/generator. If required, the concerned testing engineer shall seal complete enclosures of CTs and PTs at site.
- 7) If any damage of seal(s) is observed at any time or at the time of commissioning of these spare CTs & PTs, the Consumer/Generator shall again arrange to test these CTs & PTs for accuracy tests at manufacturer's factory in presence of MSEDCL's testing engineer, at his cost.
- 8) This approval is valid for inspection and testing of spare metering CTs and metering PTs at manufacturer's factory site. Regarding inspection and testing of spare protection CTs, PTs the Consumer/Generator shall obtain the concurrence of MSETCL, if required.
- 9) The Consumer/Generator shall submit undertaking for the above conditions on Rs. 200/- stamp-paper to Concerned S.E.(O&M) and shall submit the copy of the same to concerned S.E.(TQA) and EE(Testing) for record.

This is for your information please.

  
(Shri Kishor Shegokar)  
Chief Engineer (Dist/Testing)

**Copy s.w.r.to:-**

- 1) The Director (Operations), MSEDCL, Corporate Office, Mumbai.

**Copy s.w.r.to:-**

- 1) The Jt. Managing Director, MSEDCL, Aurangabad.

**Copy S.w.r.to:-**

- 1) The Executive Director (Dist-II/Comm.), MSEDCL, Corporate Office, Mumbai.(By email)
- 2) The Regional Directors, MSEDCL, Region-Konkan/Pune/Nagpur.(By email)

**Copy to:-**

- 1) The Superintending Engineer (TQA), MSEDCL, Kalyan, Pune, Nagpur.

2) The Superintending Engineer (TQA), MSEDCL, Aurangabad—*for necessary action as above for deputing testing engineer (preferably EE(T) Dhule) along with MSETCL's engineer for joint inspection at factory site for testing of spare metering CTs and PTs in r/o M/s Orange Suvaan Energy Pvt. Ltd.*

**Copy to:-**

- 1) All Superintending Engineers (O&M), MSEDCL. (By email)
- 2) All Executive Engineers (Testing), MSEDCL.(By email)

**Copy to:-**

M/s Orange Suvaan Energy Pvt. Ltd. (M/s. OSEPL) at village Mhasale, Sakri, Dhule.(By email)