

Guideline Operating Procedures of TSSs in Mumbai Area.

(Ref. Interlocking Scheme by RDSO drawing
no.TI/DRG/PSI/INTERLOCK/RDSO/00001/05/0)

1. Normally, both incoming line circuit breakers CB 1 & 2 shall remain closed and 110 KV bus coupling circuit breakers CB- 3 will be in open position.
 2. Power supply to traction over head equipments shall be fed through any one of two transformers by closing its respective HV and LV transformer Circuit Breakers. At a time, only one transformer will be in service. Other transformer, not on load, can be kept as
 - a. Hot standby, by closing its HV side transformer Circuit Breaker and keeping LV transformer Circuit Breaker open.
- OR**
- b. Dead, by keeping both HV & LV transformer Circuit Breaks in open position. However, each transformer shall feed load periodically at regular intervals.
 3. Bus coupler is provided on 25 kV side with Circuit Breaker CB - 8. This shall normally be closed for feeding the OHE in either side of IOL from any of the transformers.
 4. In case of outage of one feeder and transformer on other bay at a particular time, power supply can be restored through healthy transformer from other feeder by operation of 110 KV bus coupler Circuit Breaker CB – 3.
 5. **Extension of 25 KV supply in case of outage of one complete TSS.**
 - a) In the event of failure of any TSS, supply from adjoining TSS may be extended up to the IOL of failed TSS by closing the bridging CB at the SP on either side of failed TSS. Bus coupler CB no. 8 at the failed TSS shall be kept in open position along with LV transformer CB 6 & 7 at the failed TSS in open position. However, this will necessitate lower panto / raise panto of the trains in front of failed TSS, if it is not provided with neutral sections.
 - b) Otherwise, supply may be extended over complete zone of failed TSS from any of the adjoining TSS i.e. from SP to SP. Bus coupler CB no. 8 at the failed TSS shall be kept in close position along with LV transformer CB 6 & 7 at the failed TSS in open position. In this case no lower panto / raise panto is required, however the OHE voltage and load has to be closely monitored.
 6. **For paralleling of nominated Traction Sub Stations**
 - a) Energize the OHEs of concerned TSS zone up to SP locations and then close the bridging CBs at SP location.
 - b) Energize the OHE of one TSS zone. Extend the supply by closing bridging CB at SP and feeder CB & bus coupler CB at the next TSS. Then close LV transformer Circuit Breaker at other Traction Sub Station to make parallel operation of the two TSSs.