

**Series 2200 / 2400**  
**Paralleling Switchgear**

***Recommended Preventative  
Maintenance Requirements***

PM083 Rev 1 14/02/17

1. Preventative Maintenance Requirements

- Visual inspection of bus and cable connections annually. Review and retorque bus and cable connections after first year of service and check once every 3 years thereafter. If loose connections are found frequency should be increased.
- Wire Tug/Tightness checks on all components after 1st year of service. This can be reduced then to every 2 years. This includes all interconnect wiring to junction boxes.
- Check wiring for chaffing or damage resulting from vibration or heat.
- Clean equipment as applicable. Remove dust/dirt, grease, etc. with dry rags, brushes or a vacuum. Do not use compressed air as this will only force dirt or metal cuttings into electrical components and may result in equipment failure or personal injury.
- Control batteries and backup batteries (i.e.: PLCs). Test per manufacturer's recommended procedures.
- Replace PLC/CPU batteries every 5 years.
- Lamp test to verify all lamps are serviceable.
- Test and record all alarm and shutdowns.
- Verify PLC operation - Proper front panel indications. Review of PLC internal fault/event summaries. Review of internal logic and settings to equal operational values as commissioned. Visual inspection of heat damage or other abnormalities.
- Verify manual operation of all breakers and manual system operation.
- Confirm all ancillary components are operational and within operating specifications.
- Verify all protection relaying trip function using relay trip test feature annually.
- Verify configuration and Protective settings per coordination study every 2 to 3 years. Review Event and Fault records and verify correct date and time.
- Verify the generator frequency and voltage are matched to the utility supply (normal expected values for the system).
- Verify analog and digital metering accuracy and recalibrate as required.

- Verify all Micro Processor programming. Compare this to commissioning values. Confirm calibration of all metering values.
- Remove LV or MV breakers from cells (where applicable) and perform visual and mechanical inspections as specified by the breakers manufacturer's O&M manual in addition to lubrication of specified rollers and cams annually.
- Remove LV or MV breakers from cells (where applicable) and verify electrical tests as specified by the breaker manufacturer's O&M manual every 3 years for LV breakers and every 2 years for MV breakers.
- Remove and inspect draw out PT drawers and perform visual and mechanical inspections in addition to lubrication of rollers annually.