Coromandel	COROMANDEL INTERNATIONAL LIMITED Sarigam	Doc No. : INST/ SOP /05
Issue No.01	DEPARTMENTAL MANUAL OF INSTRUMENT	Issue/ Revision Date: 01/10/2017
Revision: 00	Title: SAFE OPERATING PROCEDURE FOR INSPECTION OF DCS-PLC AND SCADA	Page 1 of 2

1.0 PURPOSE:

For inspection/preventive maintenance of DCS/PLC & SCADA to maintain reliability of automation system.

2.0 SCOPE:

This procedure is applicable for inspection/preventive maintenance of DCS/PLC & SCADA of all process plant & Utility.

3.0 **DEFINITION:**

NIL

4.0 PROCEDURE:

- 4.1 Take work permit from the shift in charge/area in-charge to inspection/preventive of DCS/PLC & SCADA.
- 4.2 Clean thoroughly the panels and client PC by connecting an air blower.
- 4.3 Check the LED indication of the CPU and I/Os. It should be green. Otherwise there are some abnormalities. Contact to your respective engineer.
- 4.4 Check the CPU. Confirm which one primary and which one secondary.
- 4.5 Switch off the power supply of primary CPU. The program will be run automatically with the secondary CPU.
- 4.6 If the change over done, then check the readings on SCADA are ok or not.
- 4.7 If not, then immediately change over to previous & take secondary controller in maintenance.
- 4.8 Check the controller Battery healthiness by using the multi-meter. It should be minimum 2.5V DC.
- 4.9 Check the operation of the relays on relay card by giving command through the SCADA. If there is any problem of operation then replace the same immediately.
- 4.10 Check the SMPS by measuring the input voltage (230V AC) and output voltage (24V DC) using the multi-meter. Also check the fan status. It should always be running, when power supply is given.
- 4.11 Check the tightness of all connections with the connectors.
- 4.12 Check the OPC network status on the SCADA PC by using the "OPC server/E3 studio/ CHMI" software.
- 4.13 Check if the SCADA and control builder software operates properly or not.
- 4.14 Check the network connectivity of client PC as well as remote panels by checking status on server PC in domain icon.

Prepared By:	Reviewed By:	Approved By:
Name :	Name :	Name :
Date :	Date :	Date :

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- 4.15 After completing all the procedure, take the backup of the SCADA & logic by using the external hard drive.
- 4.16 Close the permit.
- 4.17 Preventive maintenance record should be maintain in format No: INST/F/14

5.0 FREQUENCY:

- 5.1 At the time of initial startup after shutdown of more than two weeks.
- 5.2 After every 6 months, if plant is running.

6.0 RESPONSIBILITIES:

Asst. Manager/Sr. officer (Inst.)/area in-charge

7.0 ACCOUNTABILITY

Section Head

8.0 **RECORDS**:

Inspection reports should be maintained for one year.

9.0 ATTACHMENTS:

Sr. No.	Format	Format No.
1	Preventive maintenance check points- DCS/PLC/SCADA	INST/F/14

10.0 CHANGE RECORD:

Date	REV.	CHANGES INCORPORATED	
	NO.		
01/10/2017	00	Original Issue	

** END OF PROCEDURE **

Prepared By:	Reviewed By:	Approved By:
Name :	Name :	Name :
Date :	Date :	Date :