Notes:

1. This test format is the minimum for END-to-END test of distance protection.
2. The following forms should be according to schematic drawing and type of relays and devices used.
3. **INDICATION AND ALARM CHECKING:**

Note: (CP)—Communication Panel

1. **DISTANCE PROTECTION COMMUNICATION SCHEME AND INTER-TRIP INDICATION AND ALARM CHECK:**

|  |
| --- |
| Simulation From Local S/S |
| Local S/S | Remote S/S |
| Item | Equ.no & name | Description | Ind. On NSD (CP) | IND. /FLAG on Relay panel | Control panel Ann. / HIMU | Ind. On NSD(CP) | IND. /FLAG on Relay panel | Control panel Ann /HIMU |
| 1 |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |

|  |  |  |
| --- | --- | --- |
| Local Station | Remote Station | Remarks |
| Signal Initiated | Indication At NSD (OLS) | Signal Received | Indication At NSD (OLS) | Alam In Control Panel / Himu | Flags In Relay Panel | Indication At Relay |
| FPFM-1 Permissive Send |  | FPFM-1 Permissive Received |  |  |  |  |  |
| FPFM-2 Permissive Send |  | FPFM-2 Permissive Received |  |  |  |  |  |
| Inter Trip-1 Send (INST.) |  | Inter Trip-1Received |  |  |  |  |  |
| Inter Trip-2 Send(INST.) |  | Inter Trip-2 Received |  |  |  |  |  |
| FPFM-1 Block Send |  | FPFM-1 Block Received |  |  |  |  |  |
| FPFM-2 Block Send |  | FPFM-2 Block Received |  |  |  |  |  |

1. **DISTANCE PROTECTION COMMUNICATION SCHEME AND INTER-TRIP CHECK**

|  |
| --- |
| Simulation From Local Substation |
| Local Substation | Remote Substation |
| Item | Simula-Ted Fault | Trip Relay In Rp | IND / FLAG on RP | CP ANN / HIMU | A/R | Indication NSD | Indication NSD | IND / FLAG On Relay Panel | Con Panel ANN /HIMU | A/R |
| OLS | PLCC | OLS | PLCC |
| 1 | FPFM-1 Z1 optd |  |  |  |  |  |  |  |  |  |  |  |
| 2 | FPFM-1 Z2 optd |  |  |  |  |  |  |  |  |  |  |  |
| 3 | FPFM-1 Z3 optd |  |  |  |  |  |  |  |  |  |  |  |
| 4 | FPFM-1 Z1 SOTF optd |  |  |  |  |  |  |  |  |  |  |  |
| 5 | FPFM-2 inst optd |  |  |  |  |  |  |  |  |  |  |  |
| 6 | FPFM-2 time delay |  |  |  |  |  |  |  |  |  |  |  |
| 7 | FPSM-1 Z1 optd |  |  |  |  |  |  |  |  |  |  |  |
| 8 | FPSM-1 Z2 optd |  |  |  |  |  |  |  |  |  |  |  |
| 9 | FPSM-1 Z3 optd |  |  |  |  |  |  |  |  |  |  |  |
| 10 | FPSM-1 Z1 SOTF optd |  |  |  |  |  |  |  |  |  |  |  |
| 11 | FPSM-2 inst optd |  |  |  |  |  |  |  |  |  |  |  |
| 12 | FPSM-2delayTrip |  |  |  |  |  |  |  |  |  |  |  |
| 13 | CBF ½ optd |  |  |  |  |  |  |  |  |  |  |  |

Checked: