

Relay Testing & Commissioning Checklist

Plant _____ Unit _____ Order # _____

Relay Description _____

- ☐ Hard copies of all forms and all test results (Pro Test pass/fail summary, CT screen shots, etc.) must be scanned into a single pdf document and forwarded to the plant representative and emailed to Generation Engineering at: genrelspprt@pacificorp.com.
- ☐ All connections are tight and equipment is mounted properly.
- ☐ Relay and wiring is not visibly physically damaged.
- ☐ Relay outputs trip all intended equipment including breakers and lockouts. If trip check to a circuit breaker is not possible during this scheduled maintenance, note here when it will be possible.

- ☐ Visually verify that CT shorting block connections correspond to relay CT ratio settings.
- ☐ DC voltage on the relay is within limits.
- ☐ Each element found in the relay trip or output equations has been tested and operates as designed.
- ☐ Transfer trip communications equipment has been tested and ensured to be operating correctly. Transfer trips from the relay operate all intended equipment such as breakers and lockouts. If trip check to a circuit breaker is not possible during this scheduled maintenance, note here when it will be possible.

- ☐ After testing is complete, ensure in-service magnitude and phase measurements as seen by the relay for both current and voltage are correct. **Measurements shall begin at 10 % to at least 50% of the equipment full load value.** Verify the above measured values against another relay, meter or other measurement device.
- ☐ Screen shots of the above mentioned phasors and saturation curves have been attached to this document.
- ☐ Relay is back in service and all equipment is in the normal operating position and in working order such as any test switches or other equipment modified during the tests.
- ☐ Any equipment found to be damaged or working incorrectly has been reported to protection engineering.
- ☐ Verify relay settings are correct by comparing to the settings database or having the settings reviewed by a protection engineer.
- ☐ Alarm paths and systems have been verified. Alarms to control room, or other monitored area, are verified to be in working order.

Sign and date below indicating that the above work is complete and correct to the best of your knowledge. **All boxes above must be checked.** If you think a box cannot be checked, you must contact the Generation Engineering Electrical Department to discuss.

Name

Date