CONTROLLER OSCILLATORY SWC TEST REPORT

Client: Schweitzer Engineering Laboratories, 2350 NE Hopkins Court, Pullman, WA 99163-5603, USA
Test Date: October 26, 2004
Project: 15341-27

Nameplate Data:

Controller:
Manufacturer: Schweitzer Engineering Laboratories, Pullman, Washington, USA
Model No.: 0651R011/AA820113XX
Serial No.: 2004236259

Recloser:
Manufacturer: Cooper
Type: Nova 27
Impulse level (BIL): 125 kV_peak
Rated voltage: 27 kV rms
Rated current: 630 A rms continuous; 12.5 kA interrupting
Serial No.: A-002075

Test Witness: Darin McKee & Kenneth G. Workman, Schweitzer Engineering Laboratories


Test Voltage: 2.5 kV_peak

Test Procedure: Test surge applied in common mode and transverse mode to wire pairs.

Test Results: The controller and recloser operated normally following the Oscillatory SWC Test performed in accordance with the test procedures. The controller complied with requirements of IEEE C37.60-2003, Clause 6.13.1.

Remarks: The controller passed the test.

Tested by: 
Approved by: 

Robert G. Pollock
Senior Project Specialist

A.J. Vandermaar, P.Eng.
Manager, High Voltage Laboratory

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## CONTROLLER FAST TRANSIENT SWC TEST REPORT

**Client:** Schweitzer Engineering Laboratories, 2350 NE Hopkins Court, Pullman, WA 99163-5603, USA  
**Test Date:** October 25, 2004  
**Project:** 15341-27  

### Nameplate Data:

**Controller:**  
Manufacturer: Schweitzer Engineering Laboratories, Pullman, Washington, USA  
Model No.: 0651R011:AA820133XX  
Serial No.: 2004238259  

**Recloser:**  
Manufacturer: Cooper  
Type: Nova 27  
Impulse level (BIL): 125 kV<sub>peak</sub>  
Rated voltage: 27 kV<sub>rms</sub>  
Rated current: 630 A<sub>rms</sub> continuous; 12.5 kA interrupting  
Serial No.: A-002075

**Test Witness:** Darin McKee & Kenneth G. Workman, Schweitzer Engineering Laboratories  

**Test Standard:** IEEE Std C37.60-2003, Clause 6.13.1: "Oscillatory and fast transients surge tests"  

**Test Voltage:** 4.0 kV<sub>peak</sub>  

**Test Procedure:** Test surge applied in common mode and transverse mode to wire pairs.  

**Test Results:** The controller and recloser operated normally following the Fast Transient SWC Test performed in accordance with the test procedures. The controller complied with the requirements of IEEE C37.60-2003, Clause 6.13.1.  

**Remarks:** The controller passed the test.

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**Tested by:**  
Robert G. Pollock  
Senior Project Specialist

**Approved by:**  
A.J. Vandemaar, P.Eng.  
Manager, High Voltage Laboratory
CONTROLLER SIMULATED SURGE ARRESTER OPERATION TEST REPORT

Client: Schweitzer Engineering Laboratories. 2350 NE Hopkins Court, Pullman, WA 99163-5603, USA

Test Date: 26 October 2004  Project: 15324-27

Nameplate Data:

**Controller:**
- Manufacturer: Schweitzer Engineering Laboratories, Pullman, Washington, USA
- Model No.: 0851R011AA820113XX
- Serial No.: 2004236259

**Recloser:**
- Manufacturer: Cooper Power Systems
- Type: Nova 27
- Impulse level (BIL): 125 kV<sub>peak</sub>
- Rated voltage: 27 kV<sub>rms</sub>
- Rated current: 630 A<sub>imp</sub> continuous, 12 kA interrupting
- Serial No.: A-0002075

Test Witness: Darin McKee & Kenneth G. Workman, Schweitzer Engineering Laboratories


Atmospheric Conditions:
- Temperature: 25.9 °C
- Relative humidity: 48%
- Barometric pressure: 758.6 mmHg

Test Current: 7 kA<sub>peak</sub>

Test Configurations (in accordance with the above standard):
- A – surges applied to the source bushing with the recloser open
- B – surges applied to the source bushing with the recloser closed
- C – surges applied to the load bushing with the recloser closed
- D – surges applied to a properly rated transformer with the recloser open
- E – surges applied to a properly rated transformer with the recloser closed

Test Results: The controller and recloser operated normally following the Simulated Surge Arrester Operation Test performed in accordance with the test procedures as per the above standard. The controller complied with requirements of IEEE Std C37.60-2003, Clause 6.13.2.

Remarks: None

Prepared by: Milan Vasko, P.Eng. 18 Nov. 2008
Senior Electrical Engineer

Approved by: A.J. Vandermaar, P.Eng. 18 Nov. 08
Manager, High Voltage Laboratory

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