Powertech
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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.:	0651R011AA820113XX
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 Standard:	IEEE Std C37.60-2003, Clause 6.13.1: "Oscillatory and fast transients surge tests"
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:

for Robert G. Pollock 18 Nov 2004
Senior Project Specialist

Approved by:

A.J. Vandermaar, P.Eng. 18 Nov '04
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.:	0651R011AA820133XX
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 Standard:	IEEE Std C37.60-2003, Clause 6.13.1: "Oscillatory and fast transients surge tests"
Test Voltage:	4.0 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 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.

Tested by:

for Robert G. Pollock 18 Nov 2004
Senior Project Specialist

Approved by:

A.J. Vandermaar, P.Eng. 18 Nov 04
Manager, High Voltage Laboratory

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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.:	0651R011AA820113XX
Serial No.:	2004236259

Recloser:

Manufacturer:	Cooper Power Systems
Type:	Nova 27
Impulse level (BIL):	125 kV_{peak}
Rated voltage:	27 kV_{rms}
Rated current:	630 A_{rms} continuous; 12 kA interrupting
Serial No.:	A-0002075

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

Test Standard: IEEE Std C37.60-2003, Clause 6.13.2: "Simulated Surge Arrester Operation Test"

Atmospheric Conditions:

Temperature	25.9 °C
Relative humidity	48 %
Barometric pressure	758.6 mmHg

Test Current: 7 kA_{peak}

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 2004
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