


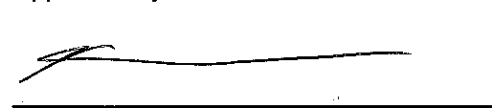
CONTROLLER SIMULATED SURGE ARRESTER OPERATION TEST REPORT

| | | |
|---|---|--------------------------|
| Client: | Joslyn Hi-Voltage, 4000 East 116th Street, Cleveland, Ohio, 44105-4398, USA | |
| Test Date: | 16 & 17 June 2004 | Project: 15075-27 |
| Nameplate Data: | | |
| Controller: | | |
| Manufacturer: | Schweitzer Engineering Laboratories, Pullman, Washington, USA | |
| Type: | SEL-351R Recloser Control | |
| Model No.: | 0351R21X81X1XX1 | |
| Serial No.: | 2002357128 | |
| Recloser: | | |
| Manufacturer: | Joslyn Hi-Voltage, Cleveland, Ohio, USA | |
| Model: | TriMod Recloser | |
| Model No.: | 3180B0705G2 | |
| Impulse level (BIL): | 125 kV _{peak} | |
| Maximum voltage: | 29.3 kV _{rms} | |
| Rated current: | 630 A _{rms} continuous, 12.5 kA interrupting | |
| Serial No.: | Prototype | |
| Test Witness: | Matt Flemming & Edward A. Steele of Joslyn Hi-Voltage, USA Derek Parmley of Parmley Technologies, UK Brian A. R. McKean of Brian McKean Associates Ltd., UK | |
| Test Standard: | IEEE Std C37.60-2003, Clause 6.13.2: "Simulated Surge Arrester Operation Test" | |
| Atmospheric Conditions: | 16 June 2004 | 17 June 2004 |
| Temperature | 25.1 °C | 24.5 °C |
| Relative humidity | 35 % | 45 % |
| Barometric pressure | 761.6 mmHg | 760.5 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:


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Approved by:


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CONTROLLER OSCILLATORY SWC TEST REPORT

| | | | |
|------------------------|---|-----------------|----------|
| Client: | Joslyn Hi-Voltage, 4000 East 116th Street, Cleveland, Ohio, 44105-4398, USA | | |
| Test Date: | 15 June 2004 | Project: | 15087-27 |
| Nameplate Data: | | | |
| Controller: | | | |
| Manufacturer: | Schweitzer Engineering Laboratories, Pullman, Washington, USA | | |
| Type: | SEL-351R Recloser Control | | |
| Model No.: | 0351R21X81X1XX1 | | |
| Serial No.: | 2002357128 | | |
| Recloser: | | | |
| Manufacturer: | Joslyn Hi-Voltage, Cleveland, Ohio, USA | | |
| Model: | TriMod Recloser | | |
| Model No.: | 3180B0705G2 | | |
| Impulse level (BIL): | 125 kV _{peak} | | |
| Maximum voltage: | 29.3 kV _{rms} | | |
| Rated current: | 630 A _{rms} continuous, 12.5 kA interrupting | | |
| Serial No.: | Prototype | | |
| Test Witness: | Matt Flemming & Edward A. Steele of Joslyn Hi-Voltage, USA Derek Parmley of Parmley Technologies, UK Brian A. R. McKean of Brian McKean Associates Ltd., UK | | |
| Test Standard: | IEEE C37.60-2003, Clause 6.13.1: "Oscillatory and fast transients surge tests" | | |
| Temperature: | 24.8 °C | | |
| 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. The controller complied with requirements of "IEEE C37.60-2003, Clause 6.13.1". | | |
| Remarks: | The controller passed the test. | | |

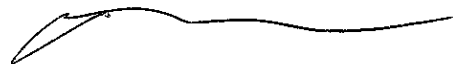
Tested by:

Approved by:



Robert G. Pollock
Senior Project Specialist

04/07/14



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04/07/14

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CONTROLLER FAST TRANSIENT SWC TEST REPORT

| | | | |
|------------------------|---|-----------------|----------|
| Client: | Joslyn Hi-Voltage, 4000 East 116th Street, Cleveland, Ohio, 44105-4398, USA | | |
| Test Date: | 15 June 2004 | Project: | 15087-27 |
| Nameplate Data: | | | |
| Controller: | | | |
| Manufacturer: | Schweitzer Engineering Laboratories, Pullman, Washington, USA | | |
| Type: | SEL-351R Recloser Control | | |
| Model No.: | 0351R21X81X1XX1 | | |
| Serial No.: | 2002357128 | | |
| Recloser: | | | |
| Manufacturer: | Joslyn Hi-Voltage, Cleveland, Ohio, USA | | |
| Model: | TriMod Recloser | | |
| Model No.: | 3180B0705G2 | | |
| Impulse level (BIL): | 125 kV _{peak} | | |
| Maximum voltage: | 29.3 kV _{rms} | | |
| Rated current: | 630 A _{rms} continuous, 12.5 kA interrupting | | |
| Serial No.: | Prototype | | |
| Test Witness: | Matt Flemming & Edward A. Steele of Joslyn Hi-Voltage, USA Derek Parmley of Parmley Technologies, UK Brian A. R. McKean of Brian McKean Associates Ltd., UK | | |
| Test Standard: | IEEE C37.60-2003, Clause 6.13.1: "Oscillatory and fast transients surge tests" | | |
| Temperature: | 24.8 °C | | |
| 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. The controller complied with the requirements of "C37.60-2003, Clause 6.13.1". | | |
| Remarks: | The controller passed the test. | | |

Tested by:

Approved by:


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