# KYLE RECLOSER WITH CONTROLLE
# IMPULSE VOLTAGE WITHSTAND TEST REPORT

| Client: | Schweitzer Engineering Laboratories, 2350 NE Hopkins Court, Pullman, WA 99163-5603, USA |
| Test Date: | 22 November 2001 | Project: | 13351-27(A-1) |

## Recloser Nameplate Data
- Manufacturer: Cooper Power Systems, South Milwaukee, WI, USA
- Rated voltage: 15.5 kV
- Rated current: 630 A
- Serial no.: 002163-AB
- BIL: 110 kV

## Controller Nameplate Data
- Manufacturer: Schweitzer Engineering Laboratories
- Type: Recloser Control SEL-351R
- Part no.: 0351 R11X81X1XX1
- Serial no.: 2001/65118

## Test Witness:
- Gregory A. Bow, Schweitzer Engineering Laboratories

## Test Standard:

## Atmospheric Conditions:
- Barometric pressure: 741.3 mmHg
- Temperature: 16.4 °C
- Relative humidity: 53%

## Test Voltage:
- 110 kV<sub>peak</sub>

## Test Procedure:
- Four test configurations, as per Clause 6.2.3 of the above standard, were tested with three positive and three negative impulses.

## Test Results:
- A) The recloser failed the impulse test requirements (external flashovers between horizontal middle phase terminal and ground).
- B) The controller passed the impulse test.

Prepared by: M. Vasko, P. Eng.  
Senior Electrical Engineer  
13 March 2002

Approved by: A.J. Vandermaar, P. Eng.  
Manager, High Voltage Laboratory  
13 March 2002

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# TEST REPORT N° 13326-26

<table>
<thead>
<tr>
<th>Manufacturer:</th>
<th>Schweitzer Engineering Labs</th>
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</thead>
<tbody>
<tr>
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<td>Pullman, WA 99163-5603, USA</td>
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<tr>
<td>Project No.:</td>
<td>#13326-26</td>
</tr>
<tr>
<td>Test dates:</td>
<td>20-21 November 2001</td>
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<tr>
<td>Tested device:</td>
<td>Recloser Control Units #1 and #2</td>
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<tr>
<td>Type:</td>
<td>SEC - 351R</td>
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<tr>
<td>Tested Reclosers:</td>
<td>Recloser #1: Whipp and Bourne, Type GVR</td>
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<td></td>
<td>Recloser #2: Kyle Recloser, Type NOVA 15</td>
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<td>Tests Performed:</td>
<td>Control Unit #1; Recloser #1:</td>
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<tr>
<td></td>
<td>• Cable Charging Current Tests at 21.9 kV, 5.98 A_{RMS}; 20 × CO operations</td>
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<tr>
<td></td>
<td>• Transformer Magnetizing Current Tests at 19.9 kV, 19.6 A_{RMS}; 20 × CO operations</td>
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<tr>
<td></td>
<td>Control Unit #2; Recloser #2:</td>
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<td></td>
<td>• Transformer Magnetizing Current Tests at 13.5 kV, 19.7 A_{RMS}; 20 × CO operations</td>
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<tr>
<td></td>
<td>• Cable Charging Current Tests at 13.5 kV, 5.25 A_{RMS}; 20 × CO operations</td>
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<td>Witness:</td>
<td>Mr. Gregory A. Bow</td>
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<td></td>
<td>Schweitzer Engineering Labs</td>
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<tr>
<td>Remarks:</td>
<td>The tests were performed under conditions similar to those specified in ANSI/IEEE Standard C37.60-1981, Sections 6.12 and 6.13.</td>
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Head of High Power Lab

Reviewed by: J.A. Zawadzki M.Sc., P.Eng.  
Director, Power Engineering Labs

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