DESIGNATION/RATING:

TYPE: 150 VCP-W 1000, 1200 Amp

3-Pole, 60 Hz RATED MAXIMUM VOLTAGE: 15 kV NOMINAL MVA: 1000 37 kA RATED SHORT CIRCUIT CURRENT: K-FACTOR: 1.3

RATED INTERRUPTING TIME: 5 Cycles CONTINUOUS CURRENT: 1200 A

TESTS PERFORMED

All tests were performed to applicable ANSI Standards, and followed procedures of ANSI C37.09 (1979). The applicable industry standards are:

ANSI: C37.04, C37.06, C37.07, C37.09, C37.010, C37.11, C37.20, C37.24, C37.100

NEMA: SG-4, SG-5

[A] Interruption, Close-and-Latch, (Momentary), and Short-Time Tests

Rated Maximum Voltage/Short-Circuit Current 15 kV/ 37kA 11.5 kV/ 48kA (Rated Maximum Voltage/K)/ (K x Short-Circuit Current) Close-and-Latch (Momentary) Capability, Asymmetric 77kA 3-Second Short-Time Current Carrying Capability 48kA

Interruption tests were performed in accordance with Table 1 of ANSI C37.09. The following test duties were completed:

1, 2, 3, 4, 5, 6-2, 6-3, 7B-2, 7B-3, 8, 9, 10, 12, 13, 14. Due to test station limitations, test duty 11 is considered to have been demonstrated by the combination of T.D. 7B-2 and T.D. 12.

[B] BIL/Dielectric Tests

BIL Impulse Test Voltage (1.2/50 micro-sec wave) to ANSI 3 x 3 Test: 95 k۷ Rated Power Frequency Withstand Voltage (AC RMS 1 minute): Tests were performed successfully for all 26 terminal test conditions WHEN INSTALLED IN A WESTINGHOUSE TYPE VC-W SWITCHGEAR VERTICAL SECTION.

[C] Mechanical Endurance Tests

No-load Mechanical Operations: 5,000 Number of Operations Between Servicing: 1,000 Number of Levering Operations: 100

[D] 1200 Ampere Continuous Current Thermal Tests

Maximum hottest spot temperature 105 C; maximum hottest spot temperature rise 65 C, WHEN INSTALLED IN A WESTINGHOUSE TYPE VC-W SWITCHGEAR VERTICAL SECTION.

CERTIFICATION: The above is a true and correct summary of data obtained from tests performed by Westinghouse Electric Corporation. The test results demonstrate the capability of the Type 150 VCP-W 1000, 1200 Ampere circuit breaker to operate properly under normal and short-circuit conditions when applied within its rating.

DATE: August 12, 1987

SIGNED:

DESIGNATION/RATING:

TYPE: 150 VCP-W 1000, 2000 Amp

3-Pole, 60 Hz NOMINAL MVA: RATED MAXIMUM VOLTAGE: 15 kV 1000 RATED SHORT CIRCUIT CURRENT: 37 kA K-FACTOR: 1.3

RATED INTERRUPTING TIME: 5 Cycles CONTINUOUS CURRENT: 2000 A

TESTS PERFORMED

All tests were performed to applicable ANSI Standards, and followed procedures of ANSI C37.09 (1979). The applicable industry standards are:

ANSI: C37.04, C37.06, C37.07, C37.09, C37.010, C37.11, C37.20, C37.24, C37.100

NEMA: SG-4, SG-5

[A] Interruption, Close-and-Latch, (Momentary), and Short-Time Tests

Rated Maximum Voltage/Short-Circuit Current 15 kV/ 37kA (Rated Maximum Voltage/K)/ (K x Short-Circuit Current) Close-and-Latch (Momentary) Capability, Asymmetric 11.5 kV/ 48kA 77kA 3-Second Short-Time Current Carrying Capability 48kA

Interruption tests were performed in accordance with Table 1 of ANSI C37.09. The following test duties were completed:

1, 2, 3, 4, 5, 6-2, 6-3, 7B-2, 7B-3, 8, 9, 10, 12, 13, 14. Due to test station limitations, test duty li is considered to have been demonstrated by the combination of T.D. 7B-2 and T.D. 12.

[B] BIL/Dielectric Tests

BIL Impulse Test Voltage (1.2/50 micro-sec wave) to ANSI 3 x 3 Test: 95 k۷ Rated Power Frequency Withstand Voltage (AC RMS'1 minute): 36 kV Tests were performed successfully for all 26 terminal test conditions WHEN INSTALLED IN A WESTINGHOUSE TYPE VC-W SWITCHGEAR VERTICAL SECTION.

[C] Mechanical Endurance Tests

No-load Mechanical Operations: 5,000 Number of Operations Between Servicing: 1,000 Number of Levering Operations: 100

[D] 2000 Ampere Continuous Current Thermal Tests

Maximum hottest spot temperature 105 C; maximum hottest spot temperature rise 65 C. WHEN INSTALLED IN A WESTINGHOUSE TYPE VC-W SWITCHGEAR VERTICAL SECTION.

CERTIFICATION:

The above is a true and correct summary of data obtained from tests performed by Westinghouse Electric Corporation. The test results demonstrate the capability of the Type 150 VCP-W 1000, 2000 Ampere circuit breaker to operate properly under normal and short-circuit conditions when applied within its rating.

DATE: August 12, 1987

SIGNED: \

DESIGNATION/RATING:

TYPE: 150 VCP-W 1000, 3000 Amp

3-Pole, 60 Hz NOMINAL MVA: 1000 RATED MAXIMUM VOLTAGE: 15 kV RATED SHORT CIRCUIT CURRENT: 37 kA K-FACTOR: 1.3

RATED INTERRUPTING TIME: 5 Cycles CONTINUOUS CURRENT: 3000 A

TESTS PERFORMED

All tests were performed to applicable ANSI Standards, and followed procedures of ANSI C37.09 (1979). The applicable industry standards are

ANSI: C37.04, C37.06, C37.07, C37.09, C37.010, C37.11, C37.20, C37.24, C37.100

NEMA: SG-4, SG-5

[A] Interruption, Close-and-Latch, (Momentary), and Short-Time Tests

Rated Maximum Voltage/Short-Circuit Current 15 kV/ 37kA (Rated Maximum Voltage/K)/ (K x Short-Circuit Current)
Close-and-Latch (Momentary) Capability, Asymmetric 11.5 kV/ 48kA 77kA 3-Second Short-Time Current Carrying Capability 48kA

Interruption tests were performed in accordance with Table 1 of ANSI C37.09. The following test duties were completed:

1, 2, 3, 4, 5, 6-2, 6-3, 7B-2, 7B-3, 8, 9, 10, 12, 13, 14. Due to test station limitations, test duty 11 is considered to have been demonstrated by the combination of T.D. 7B-2 and T.D. 12.

[B] BIL/Dielectric Tests

BIL Impulse Test Voltage (1.2/50 micro-sec wave) to ANSI 3 x 3 Test: 95 kV Rated Power Frequency Withstand Voltage (AC RMS 1 minute): 36 kV Tests were performed successfully for all 26 terminal test conditions WHEN INSTALLED IN A WESTINGHOUSE TYPE VC-W SWITCHGEAR VERTICAL SECTION.

[C] Mechanical Endurance Tests

No-load Mechanical Operations: 5,000 Number of Operations Between Servicing: 1,000 Number of Levering Operations: 100

[D] 3000 Ampere Continuous Current Thermal Tests

Maximum hottest spot temperature <u>105</u> C; maximum hottest spot temperature rise 65 C, WHEN INSTALLED IN A WESTINGHOUSE TYPE VC-W SWITCHGEAR VERTICAL SECTION.

The above is a true and correct summary of data obtained from CERTIFICATION: tests performed by Westinghouse Electric Corporation. The test results demonstrate the capability of the Type 150 VCP-W 1000, 3000 Ampere circuit breaker to operate properly under normal and

short-circuit conditions when applied within its rating.

DATE: August 12, 1987

SIGNED: