

Multiple shots on SPDs –additional tests

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Abstract—the lightning threat becomes more and more severe in low voltage power system especially in electronics and telecommunication system. The surge protective devices (SPDs) are used as common protective measures. Single pulse is the main test method described in standards such as IEC 61643-11. At last ICLP conference in 2012 a new 10-pulse generator was presented able to simulate the natural stroke with multiple pulses. This paper presents more test results with lower ratings. This will also contribute to show if multiple pulses has an effect on a coordinated system of SPDs and the protective efficiency of such a system under multiple pulse stress. In addition, a modification has been made to the generator to surimpose surges to continuous current to simulate a test regime that may be useful for wind turbines for examples. The paper introduces the purpose of the multiple pulsestest, the test system and test results.

Keywords-SPDs, tests, mutiple pulses