



Fault Current Limiter Testing Requirements Final Exam

1. Most of the existing electric transmission and distribution (T&D) infrastructure is:
 - a. nearly new
 - b. reaching the end of its useful life
 - c. in immediate need of replacement
 - d. non-functional

2. Currently testing for fault current limiters is based on _____ test procedure for various existing equipment.
 - a. a hybrid
 - b. a proprietary
 - c. an inaccurate
 - d. an obsolete

3. According to Table1, the fault current reduction for the SuperPower project was:
 - a. 10%-15% reduction
 - b. 50%-60% reduction
 - c. 20%-40% reduction
 - d. 20%-50% reduction

4. *Voltage testing* is performed in AC or DC with voltages varying from some hundred volts to:
 - a. 10,000 volts
 - b. several Megavolts
 - c. 350,000 volts
 - d. about 1,000,000 volts

5. There are two types of *short-time withstand current tests*: 1) electrodynamic and 2):
 - a. vibration
 - b. co-linear
 - c. thermal capability
 - d. electro-field frequency

6. A CB duty test is a test to see how many times it is able to _____ before the energy-storage system of the device is exhausted and it no longer functions properly.
 - a. achieve maximum voltage
 - b. withstand resistance
 - c. open and close
 - d. reach full potential

7. As of the publishing date of this document, SuperPower has the lead to develop a superconducting FCL for operation at:
 - a. 100 kV
 - b. 75 kV
 - c. 225 kV
 - d. 138 kV

8. Zenergy's FCL prototype completed its first R&D tests at 480 V and 460 A in _____ at Pacific Gas & Electric (San Ramon, CA).
 - a. October 2007
 - b. December 2006
 - c. October 2008
 - d. January 2007

9. As per Table 2, the 10 MVA test was performed in:
 - a. 2004
 - b. 2002
 - c. 2006
 - d. 2003

10. Regarding *Test Facilities and Characteristics*, current testing can be done at very high levels but _____ at low voltage.
 - a. only for 45 minutes
 - b. only for several seconds or less
 - c. for only 5 minutes
 - d. for only 3 milliseconds