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