

Faulted Component Collection Procedure

Faulted Cable System Component Field Sample Preparation and Data Collection for Dissection and Root Cause Analysis

IMCORP offers component dissection and root cause analysis services for failed cable system components at its laboratory located at headquarters in Manchester, CT. In an effort to better serve our clients, the following procedure is designed to assure that every effort is made to preserve evidence which may indicate the root cause and subsequently help to establish practices to mitigate the risk of future cable system failures.

Preparation and Data Collection Procedure:

1. Record time and date of failure
2. Record unique identification of cable segment (From transformer X To switchgear Y)
3. Record the estimated time the circuit has been in service since last outage.
4. Record current just prior to failure
5. Record any information about other power system component failures in the last year related to the same line.
6. Take pictures of and record the relative location of any over voltage protection/arrestors on the circuit. (e.g. at riser pole 400ft approximately away from the failure or at loop open point approximately 5000ft away)
7. Record distance to failure from one labeled terminal end. (70ft from transformer X)
8. Note environmental conditions (e.g. air temperature, raining, lighting, high winds, underwater)
9. Label the failed component with a tag and permanent marker before it is altered in any way
10. Take pictures of the unaltered failure site and the labeled failed materials
11. Record manufacture and model number of all components involved
12. Remove failed component with 3 feet of cable on either side failure (one side for terminations)
13. Take detailed close-up pictures of failure after removal from the system without altering the component.
14. Put failure in a plastic bag and seal with tape. Ship in a ridged cardboard box or other crushproof container to the address below.
15. Send all recorded information to apps-consulting@imcorp.com

