

IEEE Standard Criteria for Independence of Class 1E Equipment and Circuits - Redline," in *IEEE Std 384-2008 (Revision of IEEE Std 384-1992) - Redline*, vol., no., pp.1-47, Dec. 20 2008

doi: 10.1109/IEEESTD.2008.5961583

Abstract: The independence requirements of the circuits and equipment comprising or associated with Class 1E systems are described. Criteria for the independence that can be achieved by physical separation and electrical isolation of circuits and equipment that are redundant are set forth. The determination of what is to be considered redundant is not addressed.

keywords: {Circuit testing;Circuits and systems;IEEE standards;384-2008;Class 1E;associated circuit;barrier;independence;isolation;isolation device;raceway;separation},

URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5961583&isnumber=5961582>

D. Wang and W. Pan, "The study on prestressed cable stress based on brillouin-optictime optic fiber sensor," *2009 9th International Conference on Electronic Measurement & Instruments*, Beijing, 2009, pp. 2-904-2-907.

doi: 10.1109/ICEMI.2009.5274416

Abstract: The Brillouin-optic time domain reflectometer (BOTDR) fiber strain sensing technology has been used in the optic fiber and its attachment surface supporting for the axial strain distributed monitoring, A stress test monitoring is respectively on a steel hinge cable line with the three arylene fiber-reinforced plastic (AFRP) anchor, and the distributed contingency sampling point has the minimum distance of 5cm. Test results show that distributed optic fiber sensor has a high accuracy. The relative error between optic fiber sensors and strain measurements is less than 3.8 percent. In the stage of tensing anchors, a steel cable hinge line's prestressed loss is 8.8 percent; three AFRP anchors' prestressed loss is less than 6.08 percent. After a month, the steel cable hinge line's prestressed loss is 11.1 percent; AH cable prestressed loss is less than 10.3 percent.

keywords: {cables (mechanical);condition monitoring;dams;distributed sensors;fibre optic sensors;fibre reinforced plastics;steel;strain sensors;stress measurement;stress-strain relations;time-domain reflectometry;Brillouin-optic time optic fiber sensor;arylene fiber-reinforced plastic anchor;axial strain distributed monitoring;fiber strain sensing technology;prestressed cable stress;steel hinge cable line;strain measurement;stress test monitoring;time domain reflectometer;Capacitive sensors;Fasteners;Monitoring;Optical fiber cables;Optical fiber sensors;Optical fiber testing;Optical losses;Optical sensors;Steel;Stress;Brillouin Optical Time Domain Reflectometer;Measurement and metrology;distributed optic fiber sensor;prestressed cable stress},

URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5274416&isnumber=5273983>

IEEE Standard Criteria for Independence of Class 1E Equipment and Circuits," in *IEEE Std 384-2008 (Revision of IEEE Std 384-1992)*, vol., no., pp.1-0, Dec. 20 2008

doi: 10.1109/IEEESTD.2008.4723942

Abstract: The independence requirements of the circuits and equipment comprising or associated with Class 1E systems are described. Criteria for the independence that can be achieved by physical separation and electrical isolation of circuits and equipment that are redundant are set forth. The determination of what is to be considered redundant is not addressed.

keywords: {384-2008;Class 1E;associated circuit;barrier;independence;isolation;isolation device;raceway;separation},

URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=4723942&isnumber=4723941>

D. Knecht and J. Luther, "The use of multi-fiber ferrules in FTTP applications," *2006 Optical Fiber Communication Conference and the National Fiber Optic Engineers Conference*, 2006, pp. 9 pp.-.

doi: 10.1109/OFC.2006.215378

Abstract: With the long-awaited arrival of the fiber-to-the-premises initiative (FTTP), there has been a focused effort to devise the most effective solutions for construction of the needed outside plant infrastructure. The outcome of this activity is a preconnectorized solution for the distribution network based on the MT ferrule. The main advantages of the MT-based solution include lower initial capital investment per home passed, speed of deployment, and a reduced need for precise field measurements of the cable plant. The lower capital requirement for service providers results from the ability to delay in time the placement of the network access point terminal with its associated adapters and pigtails. The speed of deployment advantage comes from the compact nature of the resulting tap point. An overmold process is used to provide a small, flexible solution that works well with outside plant installation practices. Due to its flexibility, it can be routed easily. The reduced need for field tap location measurement accuracy stems from the fact that one can now install the cable and measure exactly where the final terminal needs to be because of a flexible tether length that is part of the design. An additional advantage attributable to the use of the tether is the ability to use whatever enclosure solution makes sense in a given application without regard for whether or not it passes through a sheave wheel. The proposed paper will cover the evolution of the terminal distribution system for FTTP networks and discuss the capability and performance of the new MT-based system. Test data on a new multifiber ferrule based connector to Telcordia GR-3120 will be presented. Additional testing of the completed assembly to Telcordia GR-3122 will be presented.

keywords: {optical fibre subscriber loops;FTTP applications;Telcordia GR-3120;fiber-to-the-premises initiative;multifiber ferrules;network access point terminal;Assembly;Connectors;Delay effects;Investments;Length measurement;Power cables;Pulleys;Testing;Velocity measurement;Wheels},

URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1636408&isnumber=34305>

F. Kaidanov, R. Munteanu and G. Sheinfain, "Damages and destruction of fiber optic cables on 161 kV overhead transmission lines," in *IEEE Electrical Insulation Magazine*, vol. 16, no. 4, pp. 16-23, July-Aug. 2000.

doi: 10.1109/57.855616

Abstract: All-dielectric self-supporting (ADSS) fiber optic cables are in use now on high-voltage (HV) and extra-high-voltage (EHV) overhead transmission lines (OHTL) in many countries all over the world. Their use allows the creation of highly effective data communication channels along the OHTL. However, in subtropical areas with specific climatic conditions, dry-band partial arcs have been found on the polyethylene external protective enclosure cable surface. This paper describes the various investigations performed to understand the causes for damage to ADSS fiber optic cable installed on four 161 kV OHTL and on one 110 kV, in the subtropical climate of Israel.

keywords: {arcs (electric);cable insulation;carrier transmission on power lines;optical cables;partial discharges;power overhead lines;110 kV;161 kV;Israel;all-dielectric self-supporting fiber optic cable;data communication;dry-band partial arc;insulation degradation;overhead transmission line;subtropical climate;Clamps;Optical fiber cables;Optical fibers;Petroleum;Poles and towers;Pollution;Polyethylene;Power transmission lines;Surface contamination;Wires},

URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=855616&isnumber=18582>