Ensuring future reliability using manufacturers' standards to assess cable system performance after installation

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After decades of installing cables, Wiener Netze GmbH, the public utility in Vienna Austria, is developing an efficiency strategy to move from legacy PILC cable to the new solid dielectric type cable systems and outsource its installation operations in order to reduce costs. The procedural and material shift presents an opportunity to the utility to maintain higher reliability standards at lower costs while offering a product that is easy to work with and better for the environment, but as with any change there will be a learning curve to overcome. With this, the utility is partnering with a global leader in cable reliability assessment that has one of the largest databases pertaining to the performance of new and aged solid dielectric cable systems in the field. The database, including over 30 million meters of cable systems, supports a long held theory that the root cause of cable system failures leading to service outage often originate during initial workmanship, shipping or are the result of manufacturing anomalies. Using a factory comparable partial discharge assessment, Wiener Netze has the ability to determine that all of their installed cable and component infrastructure perform to manufacturers' standards with the additional benefit of a meter-by-meter performance database to help objectively manage asset return on investment and ensure the power system performs optimally.

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