

HV/EHV Underground Transmission Testing — At Your Service

A Worldwide High-Voltage Leader

General Cable's Silec® Brand High- and Extra-High Voltage (HV/EHV) underground transmission cable system solutions have been a recognized leader in the global electric utility market for almost a half century. **As your best partner in providing a comprehensive range of HV/EHV solid-dielectric extruded cable and accessories, General Cable is also your best partner to test your HV/EHV underground transmission system.**

With unrivaled expertise in underground transmission cable systems, General Cable understands the challenges utilities face in upgrading and maintaining the electrical grid to meet increasing energy demands and provide affordable, reliable service—from system planning to final testing and post-project maintenance. We also understand that these significant and complex underground transmission projects represent a considerable investment, requiring not only the most advanced high-voltage technology that goes into design, manufacturing and testing of the HV/EHV cables and accessories but also the comprehensive commissioning and on-site testing needed to ensure maximum service life.

On-Site Testing and Commissioning

To fully support our customers, General Cable has the experience and technical expertise to perform comprehensive on-site evaluation of aged cable systems, as well as commissioning new cable and accessories to prequalify effective and efficient system performance and operation. General Cable's on-site testing and commissioning capabilities are second to none, giving utilities complete peace of mind that their systems are properly designed, installed and terminated while meeting all necessary standards.

- **AC commissioning test per IEC Standard 60840 or 62067**
- **High-voltage resonant tests and partial discharge (PD) measurement**
- **Visual inspection of all cable routes**
- **Testing of sheath bonding system**
- **Investigating of leaks, system faults and failures**
- **Comprehensive cable jacket testing**
- **Assessment of in-service systems**
- **Detailed test reports and documentation**

One Company — your source for high-performance quality HV/EHV cable system solutions and services



General Cable Testing & Commissioning Truck



Commissioning Test Preparation



Resonant Transformer System (RTS)

Rely on Our Experience and Expertise

Damage to underground cable systems and environmental events can cause disruptions in service and increased operating costs that today's utilities can't afford. General Cable invests heavily in state-of-the-art testing and commissioning technology to help our customers avoid the risks of service disruption.

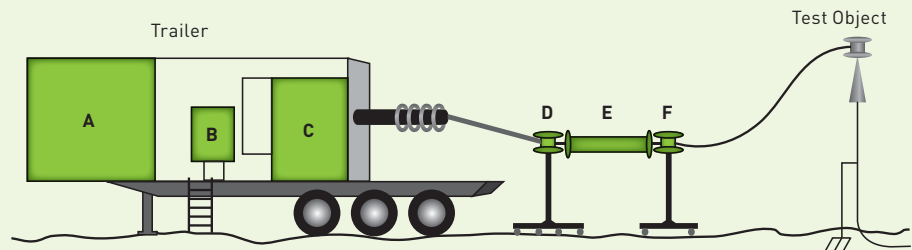
General Cable's technical experts will mobilize our advanced Resonant Transformer System (RTS) to your location and provide comprehensive testing of any length circuit up to voltages of 500 kV in accordance with either IEC 60840 or 62067 test methods and requirements for power cable systems.

General Cable's RTS is a highly advanced mobile testing system that contains a control container, exciter transformer and high-voltage (HV) reactor, along with test stands and HV filter for properly connecting to test objects without signal interference.

General Cable's advanced system of resonant testing and partial discharge measurement ensures compliance per either IEC 60840 or 62067, depending on the rated voltage of your cable system.

General Cable has the experience, the expertise and the technology to provide comprehensive, reliable on-site testing and commissioning in North America.

Mobile Resonant Transformer Setup



In the **control container (A)**, quality set-up conditions are established and loaded to the exciter transformer via computer. An optional partial discharge measuring system is also available. Together, the **exciter transformer (B)** and **HV reactor (C)** increase the initial input voltage for testing. The **initial test stand (D)** connects back to the control panel in the control container and contains the signal divider to find the proper resonance of the test object, while the **HV filter (E)** keeps interfering signals away from the partial discharge measuring circuit. The **second test stand (F)** provides the zero potential needed to properly connect the HV filter to the test object.

For more information on General Cable's HV/EHV underground transmission testing services, call +1.800.237.2726 or e-mail silecna@generalcable.com in the US, or call +1.800.561.0649 or e-mail silecca@generalcable.com in Canada.



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