Dow Electrical & Telecommunications (Dow E&T), a business unit of The Dow Chemical Company, has more than 70 years of experience in the power industry. Its global team of specialists provides support to cable makers and utilities through both technical expertise and a world-class portfolio of insulation, jacketing and semiconducting materials for low, medium, high and extra-high voltage power cables. Sophisticated R&D, manufacturing, engineering and in-house testing/validation round out Dow E&T’s overall offering and capabilities for the industry.

Investing now and for the future
When it comes to high-voltage (HV) solutions for North America, Dow E&T has nearly two decades of experience and is the only global producer of world-class HV compounds that can be sourced locally in North America. Understanding that utilities continue to invest in new and rehabilitated infrastructure, Dow E&T is making investments in its facility in Seadrift, Texas, to ensure continued supply of quality compounds made with modern equipment, process control systems and packaging, as well as logistics practices designed to meet or exceed industry standards for product cleanliness and performance.

Enhancements include:
- Continuous product quality measurement on the reactor
- World-class product transfer systems
- State-of-the-art metal detection and rejection system
- Additional tape inspection to improve continuous product quality assessment
- Majority of the equipment will now be in a climate-controlled environment
- New digital control system
- Pellet sorting capability

Quality materials matter
Cleanliness is extremely important in the production of highly reliable HV cables. Dow E&T strongly contends that quality materials matter in the construction of quality cables. With thousands of miles of new and upgraded transmission lines anticipated over the next several years, underground (UG) projects alone are expected to reach $236 million by 2015*. That’s a huge investment across the value chain that must be protected through the use of reliable, long-life cables.

DOW ENDURANCE™ SC (super-clean) HV compounds help ensure the kind of quality that cable manufacturers and utilities can count on for years of durable and reliable UG cable function without the fear of contaminants that can lead to premature cable failure.

The case for underground
Renewable generation sources, shifts in generation fuel sources from coal to gas and aging infrastructure all influence transmission development that requires HV cable. Although overhead lines (OHL) will be used for many projects, the need for HV UG cable will continue to grow. The siting of OHL is challenging in certain regions due to rights of way, topographic obstacles or desired community aesthetics. In addition, UG cable installation results in:
- Increased protection against external factors such as weather, vandalism, etc., resulting in greater reliability
- Lower visual impact (better aesthetics) that increases value of surrounding area versus overhead lines
- Smaller right of way and faster approval of applications for installation
- Lower emission of electromagnetic noise
- Lower short- and long-term maintenance costs than overhead lines
- Lower power loss

And ultimately, underground transmission leads to faster deployment of more power and happier customers.

For more information about Dow E&T HV solutions for North America, call your Dow Representative or visit www.dowhvpower.com.

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