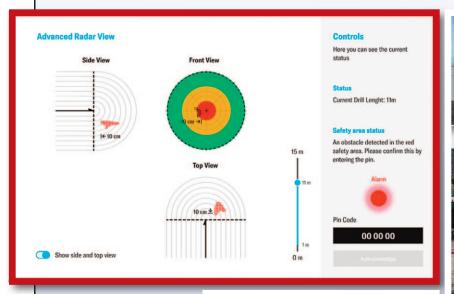
Preventing Damage from Horizontal **Directional Drilling**

Giving Sight to a Blind Technique







The equipment incorporates "look ahead" technology based on radar incorporated into the drill head





ith sponsorship from Operations Technology Development, NFP (OTD), GTI Energy is closely engaged with utilities and leading manufacturers to develop and commercialize minimally invasive technology to reduce third-party damage to underground utilities. The aim is to produce safe, cost-effective equipment that leads to faster installation and repairs, less traffic delays, significant time and cost savings, and fewer impacts on the environment.

One effort, a real-time ground-penetrating radar obstacle detection system called ORFEUS (Optimized Radar to Find Every Utility in the Street), is focused on preventing damage during horizontal directional drilling (HDD) to install underground pipes and cables. The equipment incorporates "look ahead" technology based on radar incorporated into the drill head to detect and warn the operator of any obstacles in the pathway, offering substantial benefits.

The system was developed in Europe and brought to the U.S. by OTD and GTI Energy for on-site testing to evaluate it for North American markets. Following successful outcomes, an agreement with European partners was signed. Pipeline and Hazardous Materials Safety Administration (PHMSA) is providing funding to enhance system functionality and move the technology toward commercialization. TRACTO, an HDD equipment manufacturer and parent company of TT-Technologies, will bring the technology to market in the U.S.

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