

Submarine Cable Hazards

Distribution Company Awareness

The purpose of this bulletin is to inform Electrical Distributors of the high risk hazard of aged or damaged submarine cables. Members of the public received an electrical shock, and were critically injured due to an energized submarine cable with a corroded concentric neutral. Such hazards could also lead to Electric Shock Drowning.

One of the causal factors creating the hazard of the submarine cable was the corrosion of the concentric neutral in shallow water near the shoreline. Over time, pH levels in the water, freezing and thawing of the water contributed to the corrosion of the concentric neutral. When the concentric neutral is corroded more current flows through water resulting in electric shock for the public in water. Boats and anchors hitting the cable may also contribute to damaging the cable, in similar installations.



ESA Recommends

- Incorporate submarine cables in maintenance programs to inspect and determine the condition of the outer covering and the concentric neutral of the submarine cables.
- Replace aged or damaged cables to mitigate any safety hazards.
- Temporary repairs follow approved standards or a specification, until permanent repairs or replacements are performed.