### **Standards Alert**

DOC0009 Technical Specification – HV Electrical Cables version 4 is now available.

# Why has the Technical Specification been updated?

Although limited feedback was received since the last update, there have been changes to market product availability and technological advancements that need to be reflected in this specification. Based SW maintenance records, over the last 10 years, there have been over a dozen unplanned power outages caused by failure of HV cable due to poor selection of cables and inferior installation conditions. This update aims to enhance clarity, prevent the use of less available and substandard engineering products, and align with other recently updated technical specifications.

# What has changed from the previous version?

Key changes from the previous version include:

- Remove the reference that implied the use of paper insulated cable was acceptable.
- Set the preference for all HV cable sheaths to be XLPE.
- · Prohibit direct buried HV cable installations.
- Alignment with earthing and lightning spec on screen bonding requirements.

# How do these changes impact users and what are the key benefits?

- Preferring XLPE cable sheath will provide higher operating temperatures, better resistance to moisture and chemicals, simpler installation, and often a longer service life compared to paper insulation while keeping capital expenses unchanged.
- Streamline project delivery timelines by specifying widely available market-standard products which securing more competitive pricing.

- Enhance installation reliability and safety by prohibiting the use of direct-buried HV cables which reduce the likelihood of cable strikes from possible to unlikely.
- Align with the latest AS, IEC standards, and Sydney Water technical specs to improve clarity, reduce ambiguity, and ensure consistent application across projects.

## When do these changes become effective?

- This specification applies to all projects involving the design and procurement of new HV electrical cables, where the design commences after the publication date of this standard.
- For projects where the design commenced prior to the publication of this specification, Project Specifiers may opt to apply this specification in full or in part to help promote better functionality, cost saving and delivery efficiency.
- Existing assets are not required to conform to this standard.

#### Where can I find the new version?

- <u>iConnect</u>
- SWDelivery Portal
- Sydney Water website

### How can I provide feedback?

If you have any feedback on the referred specification document, please email standards@sydneywater.com.au.

