

Building a Smarter Power Grid for Hong Kong

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Abstract

In the past few years, CLP Power Hong Kong Limited (CLPP) has introduced various new and smart technologies in its transmission and distribution systems to optimize the network operation effectiveness and enhance power supply reliability and availability. All unremittingly efforts aim to provide quality electricity supply to the customers and support the development of a greener and smarter Hong Kong.

A number of pilot projects, from 132kV to 11kV and LV systems, are implemented to develop a more holistic approach for the application of smart technology in the power system network with due regard to the operation characteristics of plant and equipment at different voltage levels. Some key smart technology applications include 132kV intelligent substation, smart distribution substation and 11kV overhead line automatic supply restoration system.

This paper will share CLPP's experience in design, engineering and application of these advanced technologies in the transmission and distribution network.