WETS D'15 Workshop

World Energy Transmission System

Renewable of cable distribution networks.

The situation of the parks equipment distribution network, including cables, is a reflection of the history of networks. Over the years, the networks extend and reinforce in the light of developments in the region, the city needs but also in terms of technological developments. Until the 1970s, the majority of distribution cables installed around the world were « paper impregnated insulated cables ». From this date, Polymer insulated cables began to penetrate the network also with the implementation of transition accessories.

Faced with uncertainty about the future of old equipment installed in some cases over 30 years including transition accessories and the desire to improve the quality of electricity, it is a new problem: the replacement of cables and accessories for distribution networks.

The success of the workshop **Renewable of cable distribution networks** in 2011: WETS D'11 (see jicable.org site or CD Rom WETS D'11) invited the organizers to complete and deepen in 2015 the results obtained. As in 2011, the objective of the proposed workshop **WETS D'15** is to gather, share and draw lessons from the experiences of operators around the world have been facing the problem of the aging of their distribution system and replacement of insulated cables and accessories.

Discussion topics

1. **General data of the network:**
   - 1.1. Network topology
   - 1.2. Length of overhead and underground lines (kilometres)
   - 1.3. MV and LV networks, in urban zones and in rural areas
2. **Technologies**

   2.1. **Cables**
   - a. What kind of cables for a long lasting life
   - b. Under-ground and submarines cables construction,

   2.2. **Accessories, experience feedback**
   - a. Banded technologies,
   - b. Heat-shrinkable technologies,
   - c. Cold retractable technologies,
   - d. Hybrid technologies, banded and shrinkable

3. **Diagnosis of ageing and estimation of the residual life**
   - 3.1. What diagnosis methods, on and off line mainly?
   - 3.2. What feedback on these methods?
   - 3.3. What progress can we expect in a near future?
4. **Renewal of the distribution networks**
   - 4.1. Methodology to optimize technically and economically the network renewal
   - 4.2. Experience feedback and now what best strategy to replace accessories and cables
   - 4.3. Which progress and how to obtain them, Easy assembly, precise instructions, simplicity and optimized design, How to improve the qualification of the fitters?