

Presentation of the Workshop

The Workshop on “Submarine Cables for Electric Power Transmission” was organized with the scope to depict the reasons of the increasing interest on the submarine cables demonstrated by the main Transmission and Distribution Operators.

This technical solution, that sometimes is the sole possible, even if very costly, gives important advantages in comparison with other conventional solutions since it allows to overcome many constraints and obstacles that are present on the territory.

In Italy it was recently put in operation the submarine HVDC cable (SAPEI) connecting the Italian peninsula with the isle of Sardinia. It was inaugurated in March 2011. This submarine cable is also defined as the “cable of records” for the following features:

- a) the highest power transmitted with rated voltage of +/- 500 kV;
- b) the deepest in the world (1.640 m below sea level);
- c) the longest in the Mediterranean see (435 km);
- d) the most environmentally sustainable for the minimum laying impact;
- e) the highest degree of technology in Europe

Other new projects of submarine cables, equal or superior in technological content, are being designed and implemented. In this contest, it must be mentioned the HVDC +/- 500 kV submarine cables that soon will link Italy to Montenegro, allowing remarkable technical and economic advantages due to the interconnection of the Balkan network with the Italian and European HV electrical systems.

It is important to note that on these days, while we are talking of MONITA Project, the first lot of submarine cable for a length of approx. 140 km is being laid on the Italian side.

Such submarine links, remarkable for their length, depth, power and voltage level are today feasible because of the huge technological development achieved by the cable manufacturer. For this reason such plants are not only possible but also highly reliable. During the Workshop an overview will be given about the important plants already in operation in Italy and in World, some of them more than 50 years old, some other very recent, and finally about the plants that are now being designed and realized.

The advantages and the problems related to the submarine cables will be analysed thanks to the presentations of very skilled speakers, both in the designing, laying and operation activities.



Università Studi di Roma “Sapienza”



Univerzitet Crne Gore - Elektrotehnički Fakultet

Workshop on

Submarine Cables for Electric Power Transmission



Podgorica, 23th March 2015

Time: 13:00 – 17:00

University of Montenegro - Faculty of Electrical Engineering

Auditorium next to the Dean's office

2nd floor

AGENDA

13.00 Introduction to the Event
*Welcome of the Dean of the Faculty of Electrical Engineering, **Zoran Veljović***

13.20 Introduction
Claudio Marchiori
Executive Director Terna Crna Gora

13.30 *The scientific interest for the submarine cables and history of their utilization*

Massimo Pompili
Professor on "Electrical Components and Technologies" – University of Roma "Sapienza"

14.15 *Terna experience on sea cables and future challenges*

Massimo Rebolini
*President of Italian CIGRE
Responsible of Technology Department Terna Rete Italia*

14.45 – 15.15 Coffee Break

15.15 *Thermal design for submarine cables to define their continuous rating*

Bruno Antonio Cauzillo
He was Manager in Enel and President of the Technical Committee CT 11 (HV OHL) of CEI (Italian Electrical Committee)

16.00 *HVDC Italy - Montenegro cable connection and its environmental impact: additional advantages due to the very low magnetic field emissions*

Milutin Ostojić
President of Montenegrin committee of CIGRE

16,30 *Present and future innovations in the technology of submarine cables*

Nikola Kuljača
*System design engineer
Prysmian Group*

17:00 Discussion

Moderator: **Claudio Marchiori** (*Executive Director Terna Crna Gora*)

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