Rectification of submarine cables of Croatian 110 kV cross-island connection
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Abstract
After 1991, power supply in the south of Croatia was very critical due to isolation of 400 kV, 220 kV and 110 kV connections from remaining power system and no possibility to repair the transmission lines damaged.

A decision was made to build a 110 kV cross-island connection. Due to time shortage, investigation of submarine cable laying was not thorough enough so after cable laying (4 cable connections) their position was surveyed. On many places cables were not lying properly at the sea bottom so the rectification was required.

Based on the Rectification Plan, the works were executed in 1996. They are supported with films, photos and other records.

Resume
Apres 1991, la situation de l'energie dans le sud du littoral croate etait critique a cause de l'interruption de liaison entre 400 kV, 220 kV et 110 kV et le reste des systemes et l'impossibilite de reparer les lignes de transmission endommagees.

On a pris decision de construire une connexion insulaire 110 kV. Vu l'urgence, les investigations sous-marines precedant la pose de cable n'ont pas ete executes de maniere satisfaisante d'ou la necessite de photographe les cables poses (4 connexions de cable). On a constate qu'en plusieurs endroits cables n'etaient pas emplaces correctement, et on a du rectifier leurs positions.


INTRODUCTION
Power system of NW and SE coastal area of Croatia was cut off at the beginning of war in 1991. Transmission lines of 400, 220 and 110 kV that connected these two parts of the system were seriously damaged. Some parts of the system were in the occupied area and could be neither repaired nor put in service. Coastal area of Dalmatia experienced serious electricity reduction during dry season.

In addition to emergency construction of some 100 MW Diesel power plants, the problem was solved by construction of 110 kV cross-island connection already included in earlier Plan and partly implemented.

110 kV cross-island connection connects 400/220/110 kV Melina substation in NW part with 220/110 kV Bilice substation in SE part of the power system.