ICT applications for O&M in a coal fired power plant: Maritza East III

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Abstract.

ENEL started in 2008 a System Integration project during the refurbish activities of the Maritza East III coal fired power plant in Bulgaria. Main scope of the project was to reach a better organization of the process data exchange in order to support Operation and Maintenance staff through new functionalities and the implementation of the newest technologies.

The presentation shall include a description of the system architecture, in terms of infrastructural and technological solutions, and shall discuss the new features and modes of operation, highlighting the most innovative solutions that make this project a significant reference in the corporate landscape.

In particular, the presentation will describe the solutions that have enabled the virtualization of the control room in order to optimize the operating procedures as a result of the internal reorganization, the synchronization of data and events for all control systems, the concentration and distribution of process data also through the creation of a cable television with dedicated thematic channels.

The Smart Point and RFID technologies have been used to allow operators to perform operational checks in the field. The innovative introduction of cable television contributed to the development of communications between various departments of the power station and the dissemination of multimedia content in different languages to facilitate the process of integration between people and popular cultures of different countries of a multinational company.