

## LIFE MANAGEMENT OF ASSET FROM HIGH VOLTAGE SUBSTATION

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**Rezumat:** *Companiile reinventează continuu propriul model de afaceri iar mentenanța poate juca un rol cheie pentru profitabilitatea pe termen lung. În România, după liberalizarea pieței de energie, companiile de electricitate sunt obligate să identifice și să coordoneze o multitudine de procese și să promoveze competitivitatea. Este necesar să se lucreze în siguranță și cu responsabilitate față de mediul ambiant, respectând obiectivele stațiilor electrice. Lucrarea va prezenta strategiile de mentenanță și aspectele informaționale (tehnice, financiare, sociale, politice, legale, de risc) ale procesului de decizie. Metodologia propusă pentru mentenanța stațiilor electrice se va concentra pe ISO 9001/14001.*

**Abstract:** *Companies have to reinvent continuously their business model. Maintenance can play a key role in the long-term profitability of a company. In Romania, especially since the liberalization of the energy market, the electrical companies are forced to identify and coordinate a lot of processes and to promote competitiveness. It is necessary to work safely and be environmentally responsible in order to achieve electrical substations objectives. In this paper will be presented maintenance strategy (replacement, upgrade or repair) and informational aspects of decisional process (technical, financial, social politic, legal and risk aspects). Proposed methodology regarding the maintenance of electrical substation will be focused in how to improve the decisions for improving asset maintenance performance through ISO 9001/14001.*

**Keywords:** maintenance, electrical substation, decision process.

### 1. Introduction

In Romania, large parts of the 110kV, 220 kV and 440 kV electrical substation was designed with the aim of reducing transmission losses. Many electricity distribution companies find themselves struggling to power a 21<sup>st</sup> century world using the technologies and management concepts of the 20<sup>th</sup> century.

Especially since the liberalization of the energy market, have been facing new challenges. As increasing demand pushes aging grids to the breaking point, electricity distribution companies around the world face a dilemma. On one side, demand for high-quality, uninterrupted service continues to grow. On the other, regulators are loath to allow utilities to raise rates to pay for dearly-needed infrastructure improvements.

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