

Implementation of Enterprise Asset Management (E-AM) System at Oman Electricity Transmission Company

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Abstract : Enterprise Asset Management (eAM) has been implemented across different Generation, Transmission and Distribution subsidiaries in Nama Group companies. As part of Nama group, Oman Electricity Transmission Company (OETC) was the first company to implement this system. It was very important for OETC to implement and maintain such a system to achieve its business objectives and for effective operations, which will also support the delivery of the asset management strategy. Enterprise Asset Management (eAM) addresses the comprehensive asset maintenance requirements of Oman Electricity Transmission Company (OETC). OETC needs to optimize capacity and increase utilization, while lowering unit production. E-AM will enable OETC to adopt this strategy. Implementation of e-AM has improved operation performance with preventive and scheduled maintenance as well as it increased safety. Implementation of e-AM will also enable OETC to create optimal asset management strategy which will increase revenue and decrease cost by effectively monitoring operational data such as maintenance history and operation conditions. CMMS (Computerised Maintenance Management System) is the main software and the back-bone of e-AM system. It is used to provide an improved working practice to properly establish information and data flow related to maintenance activities. Implementation of e-AM system was one of the factors that supported OETC to achieve ISO55001 Certificate on fourth quarter of 2016. Also, full implementation of e-AM system will result in strong integration between CMMS and Geographical Information Systems (GIS) application and it will improve OETC to build a reliable maintenance strategy for all asset classes in its Transmission network. In this paper we will share our experience and knowledge of implementing such a system and how it supported OETC's management to make decisions. Also we would highlight the challenges and difficulties that we encountered during the implementation of e-AM. Also, we will list some features and advantages of e-AM in asset management, preventive maintenance and maintenance cost management.

Keywords : CMMS, Maintenance Management, Asset Management, Maintenance Strategy

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