

## 787 – Digital Transformation Journey into a New Era

Authors: Shervin Shokooh (ETAP)

Abstract: Oil and Gas companies are in a constant state of change and supplying power to the new production sites is an ever growing challenge. With assets distributed throughout a large geographical area augmented with the complexity of integrating and coordinating the new distribution energy resources such as offshore wind and solar energy sources brings challenges to between engineering, operation, and planning.

This paper expands on the PCIC Europe-19 best paper category titled: 'A model-driven approach for situational intelligence & operational awareness' to serve as a handbook on the digital twin journey for oil and gas owner-operators adopting technologies to design, operate, automate, and optimize their most critical assets as they transform into a new energy future.

The paper will include factual data on how to demonstrate to various tiers with organization (operations, engineering, planning, maintenance) the benefits of adopting the electrical digital twin and how such a platform is vital to the safety, reliability, maintainability, and profitability of the organization.