ISSN 0511-5728
The West Indian Journal of Engineering
Vol.42, No.1, July 2019, pp.12-21

Sustaining Asset Integrity in the Trinidad and Tobago's Energy Sector: An Assessment

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(Received 09 November 2018; Revised 18 February 2019; Accepted 21April 2019)

Abstract: *This paper assesses what is needed to sustain the integrity of assets in Trinidad and Tobago's Energy Sector by identifying gaps in knowledge. The next step in continuing research outside the scope of this paper will be to conceptualise and propose a framework for an Asset Integrity Management System (AIMS). The approach used was to compare global and local AIMS to establish best practices and investigate the critical success factors required for a sustainable AIMS implementation. Next an analysis was done of global governmental regulations shaped by major accidents, and local safety regulations and the gap between AIMS research and practice identified. Finally, the findings of the National Facility Integrity Audit conducted in 2016 were explored. This research was limited to organisations in the local energy sector of Trinidad and Tobago. A large gap in knowledge was identified both in AIMS and associated governmental regulation. A robust AIMS will provide assurance to organisations that major accidents which are potentially business eliminating can be averted. It is also of paramount importance to the energy sector whose contribution to GDP was 42% in 2014, making that sector the major revenue provider to the government. The focus is how to communicate a standard and consistent message of a robust AIMS, and how to ensure that it is integrated into the existing business management system. Future research can focus on testing the proposed framework developed from the gaps identified with a larger sample of energy sector companies and use the findings to develop a national framework for AIMS for the energy sectors.*

Keywords: *Asset integrity management; critical success factors; governmental regulations; process safety indicators.*