

Special Research Study Title	Provisions and Cost Estimation for Decommissioning of Fixed Offshore Structures in the Gulf of Thailand
Project Credits	6
Candidate	Mr. Wiboon Hongcharoenkun
Project Advisors	Dr. Chainarong Athisakul Mr. Thongchai Phanyasahachart
Program	Master of Engineering
Field of Study	Civil Engineering Technology
Department	Civil Engineering
Faculty	Engineering
B.E.	2554

Abstract

This research aims to study the provisions and cost estimation for decommissioning of fixed offshore structures in the Gulf of Thailand. Three key stages in decommissioning process, which are Pre-Decommissioning, Decommissioning, and Post-Decommissioning, are presented. The data of the Erawan field is used to establish an example case. The example case used in this study composes of 6 platforms i.e., Central Processing Platform, Production Platform, Wellhead Platform, Living Quarter Platform1, Living Quarter Platform2, and Flare Tripod Platform. The parameters used in this study are assumed based on the data in the period between 2009-2011. The best practical environmental option (BPEO) is used to make the decision for each decommissioning state. The decommissioning costs consist of platform preparation and marine growth removal, well plugging and abandonment, conductor removal, mobilization and demobilization, topside and jacket removal, and site clearance. It is found that the cost for the topside and jacket removal is the highest among the costs of the fixed offshore structure decommissioning in the Gulf of Thailand. The ratio between the cost and the total weight of structures decreases as the total weight of structures increases.

Keywords : Cost Estimation / Decommissioning / Fixed Offshore Structures / Gulf of Thailand