CASE 7

Floating Production System Conversion: A 6-month Challenge

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4th March 2019, Monday, first working day of the month for Michael Johnson. It was a sunny day. With a tired face, Michael, lead design engineer of Alpha Energy was walking back to his office in 74th floor of KLCC after a long discussion with a consultant at KL Convention Centre. The moment he stepped into the office, Ms. Susie, secretary of Mr Yusoff, Project Manager of Alpha Energy, whisked him off and whispered in his ear, "Mr Yusoff has been looking for you since early morning, you better meet him now." "Hello Mr Yusoff, how's your day?" Michael greeted with a poker face, even though he was exhausted and not in the mood. Mr. Yusoff informed Michael about the decision of the board of directors to end the production of Gumusut, a floating production unit (FPS), installed in 1200 m water depth of Sabah, by year 2020. He also highlighted that the unit is proposed to be converted to a Mobile Offshore Drilling Units (MODU) by year 2025, and Michael has to take the lead in the feasibility study of the unit conversion. Michael was caught by surprise hearing about all

these developments as he has never ever expected a new project in this period of economic crisis. His jaw nearly dropped when Mr Yusoff instructed him to prepare the project design to be presented to the board in six months' time. Six months is too short a period for him as he needs to finish up the project, he currently has in hand which is due in two months. Also, a detailed background study is needed for this task. At this point in time, Michael should start preparing the execution planning for the project, followed by the conceptual design. Mr Yusoff left the room after delivering his message, leaving Michael down in the dumps and worried.

Alpha Energy

Alpha Energy was found in 1982 as a Malaysian oil and gas company that integrated the exploration, production and delivery of energy to meet the society's growing needs. In the early years, the company focused mainly on the activities at the near shore or shallow water region by fixed jacket platforms. Up to date, there are more than 200 fixed jacket platforms that were installed in the Malaysian water region, particularly in the oil field around Peninsular Malaysia Operations, Sabah Operations and Sarawak Operations. In year 2007, Alpha Energy has made its maiden entry to the deep-water operation by the K-Truss Spar. The platform is located in water depth of 1300 m at Block K, deepwater offshore Sabah in the Sabah Delta Basin. The company proudly announced that this was the first and only spar platform that is installed away from Gulf of Mexico. Following that, the company has launched another two deepwater platforms in water depth of 1200 m and 500 m by year 2008 and 2014, respectively. Mr Yusoff, as the Project Manager, has been following the journey with the company for 20 years.