OPTIMIZING BEHAVIORAL DYNAMIC MOVEMENTS OF SSP-300 USING VARIATION OF BILGA DIMENSIONS

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Abstract

Again, an innovation in technology is reborn from one of direction in offshore technologies. Sevan Marine, an offshore building design company, has successfully developed a brand new design concept, named sevan stabilized (SSP) with a cylindrical-shaped structure at hull. The concept will be functioned as drilling platform of production platform and FPSO, especially for a very wild-type environmental condition of operational region in deep water. Various excellences of SSP both in security, capacity and efficiency in production costs are the advantages of this bridge. In this final report examination, will be discussed about motion responses of SSP-300 with both variations in diameter and height of bilga. Begun with SSP structure modeling in each dimension of bilga using software MOSES 7.0, then the analyses of Response Amplitude Operator (RAO) and movement responses of structure using software MOSES 6.0. The purpose of this final project is to find out the most optimum model. The result of the analysis showed that the best stability and most minimum structure movement model is a SSP model with both diameter and height of bilga are 65.00 m and 3.50 m

Keywords: SSP, bilga, RAO, Optimum