

## عنوان مقاله:

Seismic Reliability Assessment of Jacket Offshore Platforms

## محل انتشار:

سیزدهمین همایش صنایع دریایی (سال: 1390)

تعداد صفحات اصل مقاله: 7

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## خلاصه مقاله:

The performance-based earthquake engineering has gained major attention in assessment of the structural dynamic behavior of Structures in the past decade. In this paper, Analytical models are employed including a comprehensive nonlinear model for offshore platforms that incorporates Fiber Elements which are capable of modeling post-buckling behavior of braces, Incremental dynamic analysis is then utilized to generate required data for performance based evaluation based on nonlinear dynamic analyses and reliability theory with regard to uncertainty. Moreover, case study on presently designated jacket offshore platforms in South Pars Gas Field (Phase 19 platform) Of the Persian Gulf region has been performed. Two-dimensional models of the mentioned platforms and the pile stubs with actual soil in situ characteristics are simulated using OpenSees software. This research is intended to contribute to the progress in improvement of the methods on seismic design and evaluation of offshore structures.

## کلمات کلیدی:

Performance-Based Earthquake Engineering (PBEE), Incremental Dynamic Analysis (IDA) Pile- Soil-Structure Interaction, Uncertainty, Confidence Level, Mean Annual Frequency (MAF)

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/138876>

