

Interactive comment on “Reliability analysis of offshore wind turbine foundations under lateral cyclic loading” by Gianluca Zorzi et al.

Anonymous Referee #2

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This paper presents a methodology for reliability analysis of complex structures, and applies it to offshore wind turbines. The paper is well written for most part and presents relevant information. I have the following suggestions for improving the manuscript: -Reference or background information for the chosen stochastic input variable parameters would be needed. -Justification for choosing the 2nd-order polynomial response function would be helpful. -The discussion about target reliability index on pages 3 and 4 needs changes. How can it be argued that SLS target should be in the range given, when Eurocode specifies it as 2.9? -The reliability analysis results presented in Section 3.4 need to be improved, some discussion on the design values of the random parameters would be needed. -The paper contains a number of typos.

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