Interactive comment on “A Systematic Approach to Offshore Wind Turbine Jacket Pre-Design and Optimization: Geometry, Cost, and Surrogate Structural Code Check Models” by Jan Häfele et al.

Anonymous Referee #2

Received and published: 16 July 2018

This paper presents an approach to offshore wind turbine jacket pre-design and optimisation. A jacket model and a cost model are developed in this work.

Specific comments are as follows.

1. Introduction

The novelty/contribution of the paper is unclear and should be highlighted in the introductory section.

4.1. Training and Validation Data Sets
Please justify the values used for jacket model parameter boundaries in Table 1.

4.3. Time Domain Simulations

Please elaborate how the soil is modelled in the model to take account of the soil-structure interaction.

4.4. Post-Processing of Time Domain Results

Please justify the choice of S-N curve used in the study.

Please provide the references for values of wind and current speeds as well as the values for significant wave height in Table 3.

5. Example

Please justify why normal distribution is used for all cost model parameters.

Please justify the values of standard deviation in Table 5.