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Interactive comment on "Probabilistic Design of Wind Turbine Blades with Treatment of Manufacturing Defects as Uncertainty Variables in a Framework" *by* Trey W. Riddle et al.

Anonymous Referee #2

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This paper presents the probabilistic design of wind turbine blades considering the manufacturing defects. Overall, the paper is written well, and the work presented in the paper is interesting.

The specific comments are as follows.

1. The quality of figures in the paper needs to be improved through using larger font size and increasing the resolution.

2. The introductory section needs to be expanded. For instance, a review of relevant studies on the probabilistic design of wind turbine blades should be added.

3. More details of the wind turbine blade used in the case study should be given.

4. It would be appropriate to use a table to list all the stochastic variables considered in the study. Additionally, the distribution type, characteristic values, standard deviation of each stochastic variable should be given.

5. It would be appropriate to add a case study to validate the FEA model of the wind turbine blades used in this paper.

6. The target probability of failure for wind turbine blade given by design standards is generally very low. Can authors justify why the calculated probability of failure (e.g. the results presented in Fig. 15) is much higher than the target probability of failure given by design standards?

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