

### **Author Comments for Anonymous Referee #1**

The authors are grateful for the comments, suggestions, and insight from the reviewer. Please find responses below.

**Question #1:** The title of the paper may need a rethink. I have expected further discussions on links between safety factors and design expectations.

**AR** We are working on a new title. Perhaps "A Framework for Treating Defects as Uncertainty Variables in Wind Turbine Blade Analysis".

**Question #2:** Some enhanced discussion on target reliability levels and links to blade life time would be helpful.

**AR** The purpose of the article is not to address what a target reliability level should be but rather to propose a methodology wherein the effects of defects can be characterized probabilistically. Some discussion will be provided which characterizes the current approach to blade reliability and how it can be enhanced by this process.

**Question #3:** Section 3.4 seems very interesting but limited information is given, is it possible to expand the discussion around Figures 19 and 20?

**AR** Originally, the authors planned to submit an entire paper on this section as part of a series. Some additional dialog will be provided to better tie in the two figures and the overall culmination of the body of work.

**Question #4:** The paper seems to end without many concrete conclusions, is it possible to improve this section?

**AR** The authors are working to better state the conclusions. The work has shown that if wind turbine blades can be designed using a probabilistic approach that incorporates defects, the generic safety factor can be reduced. This will ultimately lead to reduced costs in the construction of blades as they will not need to be "over-built".

**Question #5:** There are some typos in the paper, please recheck the draft manuscript.

**AR** The authors are proof reading in detail and will address all typos.