Interactive comment on "Sensitivity of Uncertainty in Wind Characteristics and Wind Turbine Properties on Wind Turbine Extreme and Fatigue Loads" *by* Amy N. Robertson et al.

Anonymous Referee #3

Received and published: 4 March 2019

- Very interesting paper with very interesting and useful results. - The baseline methodology should be described in more detail in order to stand out as reference. For other wind systems. In particular sections 3.3.1 and 3.3.2 should be revised to clarify to the reader in which way the initial function was adjusted. This is done good on a detailed level, but it would help to get a higher-level summary of the idea behind the applied procedure. Also, it should be highlighted throughout the paper that the approach is a tailored approach for the problem at hand. The alteration of the baseline formulas as well as the threshold evaluation of EE indicates that classical SA is not applied. There are good reasons presented for it, and i expect the results to be valid nonetheless, but the variation of standard approaches is significant. - The plots are

quite comprehensive. It could be sufficient to just show exemplary plots to describe the applied methodology, and provide the full set of plots inside the appendix. The summarizing tables are very helpful. - EE is generally used as screening method, in order to identify relevant input parameters. In this sense, the values of the resulting EE should be handled with care. They only provide an indicator of relevance, not of the sensitivity (or even the comparative relevance). This should be taken into account when evaluating the resulting EEs.

Please also note the supplement to this comment:
https://www.wind-energ-sci-discuss.net/wes-2019-2/wes-2019-2-RC3-supplement.pdf

Interactive comment on Wind Energ. Sci. Discuss., https://doi.org/10.5194/wes-2019-2, 2019.