Dear Susanne,

thank you a lot for taking over the editorship and taking time to read through the manuscript. Here are our answers to your review comments and suggestions.

1. Reviewer 1 had the following suggestion: "What is novel in the paper is on the one hand the relation to the experiences of the residents, and on the other hand the analysis and comparison with acoustic signals. The authors should give much more emphasis and more space to these two aspects. The energy decay should be an adjunct to support this discussion and the conclusions about the problem with the residents."

This was not addressed in the rebuttal nor revision and i would ask that you incorporate this constructive suggestion.

We moved the Lauterstein amplitude decay estimation to the appendix to reduce the section on amplitude decay estimation as suggested by reviewer 1. We missed to clearly point this out in the previous answer to the review.

2. In the revision, most materials related to wind farm Lauterstein were moved to the Appendix. So even though sections 1, 2 and the beginning of section 3 discuss two wind farms (Lauterstein and Tegelberg), the results only discuss Tegelberg. I can see that there are reasons to do so, but these considerations need to be explained in the manuscript. This requires an adjustment of the Introduction and Measurements sections (where the expectation is raised that results and analyses of two wind farms will be presented) and a short addition to section 3 to explain why Lauterstein is not part of the main manuscript.

We have now added text in sections 1-3 to better explain why the focus is on wind farm Tegelberg. We now explicitly describe this in the manuscript (lines 56-58 and lines 81-84).

3. Tegelberg and the municipality Kuchen are close to a railway line and the measurements at Kuchen are disturbed by the trains. As this was to be expected, i assume that there were reasons to still select Tegelberg and Kuchen for this study (in the reply to reviewer 2 you hint at this). I suggest that the manuscript discusses the reasons why Tegelberg and Kuchen were still selected for this study, despite the railway line through the municipality.

Our measurements at wind farm Tegelberg and in the village of Kuchen were directly colocated with acoustic measurements, and in general our focus is on this municipality because of the high number of annoyance reports. At wind farm Lauterstein there are almost no annoyance reports and no coincident acoustic measurements, This is now explicitly explained in the manuscript.

## Minor comments from marked draft:

- Suggest not to use abbreviations in abstract – only the abbreviation for wind turbine (WT) is used and this is also used a lot in the main text, so we hope this is acceptable.

- A clarifying comment was added that there were 5 stations running permanently and 5 temporarily at the residents in Kuchen.

- Figure 2 was changed to a simpler, less ambiguous colorbar

- We are grateful for the rewording suggestions which have been adopted.