The authors presented a very interesting and valuable study on optimization of WT blade tip. Particularly, it seems that the main contribution of the research is on proposing a novel methodology which can be implemented in the process of optimization. Through employing that process, 12 design variables which is a considerable number of variables in comparison with previous investigations on blade tip shape, have been taken into account. Their results show that for the optimized geometry of the blade tip, the power output of the turbine has been increases 1.2% while there is no excessive bending moment at the tip location, i.e. top 10% of the blade length. The manuscript is very well written and structured. The authors have provided a very comprehensive literature review with regard to the corresponding research area. However, there are few issues need to be resolved and clarified to improve the article. The comments are summarized as follows:

- Since the literature review is extensive and it occupies a big portion of the manuscript, the reader might be confused about the novelty of the paper at the end of “literature review” section. I would suggest to re-state the novelty and contribution of the study at the end of this section.
- At page 18, line 535, it is mentioned that the flow over blade has been considered to be fully turbulent (which is true!). It would be more informative to include the physical justification behind that assumption.
- It is indicated in the manuscript that steady-state flow modeling has adopted to solve the equations. However, as you confirm, tip vortices are unsteady phenomenon in nature and thus steady simulations might affect significantly the results. How do you justify this issue? Is there any other previous investigation that clearly addresses that effect?
- In figure 3, it would beneficial for the reader to see the boundary conditions in the figure where the domain is displayed.
- The operating conditions of the given turbine has not been clearly presented. For instance, it would be great to include the power curve of the turbine (Cp ~ TSR), so the reader can identify that the rotational speed at which your simulations are performed, is lower than the optimum TSR or higher. TSR as a governing parameter of the fluid flow around the turbine, significantly influence the flow structures at the blade location since it determines the angle of attacks experienced by the blade at different sections.
- Finally, although the focus of this study is on the methodology and its effectiveness, it would be crucial to validate the numerical results against any available data. Particularly, because the authors concluded about the correctness of the results obtained from the optimization process, i.e. 1.2% increase in power output. Since the simulations are not performed in unsteady-state mode and the results have not also been validated, the

increase in the power obtained from the optimization process might not be reliable.