

15/05/2020

Many thanks to the Associate editor for taking the time to have a look at this paper. Please find below the reply of the authors in red. A pdf which shows the changes with respect to the previous version is uploaded as well.

#### Section 1 Introduction

Lines 16 – 21: Motivation could use a bit of work. It is not bad but it could be better. Offshore is not the only place where increasing rotor size and slender flexible blades present design challenges. The square cube law is introduced without context – most readers should be familiar but not all. Transition to introducing aerodynamic model types is abrupt

Lines 26-29: again, a little weak. The author assumes a lot of knowledge of the readers about existing turbine design practice.

The first part of the intro (line 16-29) has been rewritten to take into account the suggestions.

Line 30 – can you explain in one sentence WHY vortex codes are more expensive?

The sentence has been modified to clarify this point.

#### Section 2

The AVATAR 10 MW turbine is introduced without any details. Given the motivation around large rotors with slender flexible blades, it would be nice to know something about the design features of that machine – how stiff are the blades? How large is the chord relative to typical turbines? Any novel features like aeroelastic tailoring or other things that would be good to know? Basic details of rotor diameter, specific power, etc.?

Several relevant details of the turbine are added.