A Parametric Study of Low Wind Speed Enhancement System

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ABSTRACT

A research study on a low wind speed enhancement system in Malaysia. The system is used to harness wind energy from all direction to generate electricity through a wind turbine. The objective of this research is to study the low wind speed enhancement system with different geometry parameter and optimize the performance of the design. There are 2 software that used in this research which is Autodesk Inventor and ANSYS Fluent. Besides that, there are total 4 system design and 4 research on the chapter 4 results and discussion. A series of parametric simulation has been done in this research to optimize the performance of the system. The wind speed at the nozzle has increase from the first design 2m/s to the final design 5.7m/s which is 96.1% in different.