

## Review of: "Grid-secluded Induction Generator with ANN and Intreval Type-2 Fuzzy based Controller for Wind Power Generation with Smart Load Control"

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Potential competing interests: No potential competing interests to declare.

1-There is an ambiguity in some points for example the second section stated that inverter frequency is maintained at constant 50Hz using a micro controller however it wasn't shown which micro controller used or the reliability of such micro controller.

## 2-Numbering errors in figures:

- In the last paragraph of page 2 "Fig.2 (a) is the d-axis ...." This should be Fig.1
- in the subsection A in the third section "An artificial neuron is shown below in Fig.2" This should be Fig.3
- 3-There may be some details that are not written or clearly mentioned, for example in the subsection C in the third section the controller of the smart load.
- 4-It was not clear how the ANN Implemented in the experimental work.
- 5-The left column in page 5 is redundant
- 6-Using ANN is unnecessary and has no real benefits.
- 7-There is a conflict regarding section 2 and 4 in the second paragraph of section 2 states that a PI controller is used to generate the PWM pulses however in section 4 stated that "The MOSFETS are driven using *ATMEGA* microcontroller."

The following should be added:

Increased discussions about the front control system in addition to the type of generator IG is required

Figure showing the structure of the whole system from MATLAB Simulink

A figure showing the structure of the control system used in the generator side and the load side MATLAB Simulink

A picture showing the entire practical system.

Presenting some results from MATLAB Simulink showing faults.

Explanation of the use of a Bidirectional converter in the generator side IG.

