

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

THE REVIEW REPORT ON THE MANUSCRIPT TITLED "Grid-secluded Induction Generator with ANN and Intreval Type-2 Fuzzy based Controller for Wind Power Generation with Smart Load Control".

SUBMITTED BY

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Comments

The manuscript presents a "Grid-secluded Induction Generator with ANN and Intreval Type-2 Fuzzy based Controller for Wind Power Generation with Smart Load Control," the following points need to be addressed to make the paper considered for publication.

The paper needs much improvement and followings are some comments for the improvement.

- 1. Title of the manuscript... "Grid-secluded Induction Generator with ANN and Intreval Type-2 Fuzzy based What does the author mean "Intreval"?
- 2. Title of the manuscript... "Grid-secluded Induction Generator with ANN and Intreval Type-2 Fuzzy based Controller for Wind Power Generation with Smart Load Control""------the manuscript doesn't address about "Grid-secluded"
- 3. In Chapter 1 it is stated that....... In this paper, a three-phase, cage rotor induction machine is used as an induction generator which is driven by a wind turbine with artificial neural network (ANN) and Interval type2 fuzzy inference based MPPT control...... but the manuscript doesn't address the objective. How the Induction Generator is driven by wind turbine with ANN?
- 4. Statements in abstract differ from the conclusion part of the manuscript which doesn't address the objective.
- 5. An artificial neuron is shown below in Fig.2......But Fig 2 Setup for the proposed generation scheme.
- 6. Any justification why the authors choose ANN with Type -2 Fuzzy for solving the problem.
- 7. Section II & III merely explains about Scheme & Control Procedure. Implementation of these algorithms must be included.
- 8. ANN & Type 2 Fuzzy implementation with real parameters must be included as a small part for the ease of readers.(conventional / generalized structure given).
- 9. Labeling Fig / Figure..... font Consistency required throughout the manuscript.
- 10. .Numerical Analysis / Tabulation were included in the manuscript for better result analysis. Still the description part provides insufficient explanation
- 11. The computation time/trial should be mentioned for both systems
- 12. The population size for both the systems applied in the manuscript was is not justified
- 13. The equations are not clear and there is no comparison in the case studies between the conventional and the suggested algorithm.
- 14. The question of the reviewer to the authors is that what the reason of using the proposed method for this problem.
- 15. What is the critical justification for the research?
- 16. What are the unique characteristics of the problem which make the proposed method fit better than the other methods or the major drawbacks of the other previous approaches in particular the other
- 17. However, the reviewer is not convinced of the results since many of the compared algorithms? What is the reason for the other methods not to find a best result?
- 18. Significant work has been done with respect to the review of the literature and how this particular study fits into existing findings.
- 19. There are a few grammatical errors although the quality of communication is largely acceptable.
- 20. Mathematical modeling must be included
- 21. Implementations part must be included
- 22. Experimental setup shall be incorporated in the manuscript
- 23. Nomenclature can be included
- 24. Problem formulation- To be included
- 25. Algorithm Parameter setup may be included
- 26. Constraint handling must be shown by a flowchart for the ease of reader.
- 27. Can the authors justify the significant difference in applying of ANN & Type 2 Fuzzy to the current problem?