Review Form 3

Journal Name:	**Journal of Energy Research and Reviews**
Manuscript Number:	**Ms_JENRR_129044**
Title of the Manuscript:	**System Design of a Customized Solar Photovoltaic Power System for a Microcontroller-based Weather Station in Minna, Nigeria**
Type of the Article	**Original Research Article**

General guidelines for the Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty'**, provided the manuscript is scientifically robust and technically sound.
To know the complete guidelines for the Peer Review process, reviewers are requested to visit this link:

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PART 1: Comments

	Reviewer's comment	**Author's Feedback** *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.	**This manuscript addresses a critical problem in meteorological studies: data loss due to power failures in weather stations. The proposed design of a solar photovoltaic power system for a microcontroller-based weather station is practical and well-documented. It ensures continuous operation of weather stations, which is crucial for reliable atmospheric data collection and analysis. This research is significant for energy management in remote installations and contributes to renewable energy solutions.**	
Is the title of the article suitable? (If not please suggest an alternative title)	**The title is accurate and clearly reflects the manuscript's content. It does not require changes.**	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	**The abstract provides a clear and concise summary of the problem, methodology, and outcomes. To enhance its impact, consider adding a brief mention of the system's robustness under unfavorable weather conditions.**	
Is the manuscript scientifically, correct? Please write here.	The manuscript is scientifically correct and adheres to established engineering principles. The methodology for load analysis, component selection, and system design is thorough and appropriate for the study.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	The references are recent and relevant. However, the inclusion of additional references on solar PV advancements under adverse weather conditions could provide a broader context.	
Is the language/English quality of the article suitable for scholarly communications?	The language is clear and suitable for scholarly communication. Minor grammatical improvements in the introduction and methodology sections would enhance clarity and readability.	
Optional/General comments	Consider conducting a sensitivity analysis to evaluate the system's performance under extreme weather conditions. A cost-benefit analysis would add practical value for decision-makers and potential adopters	

PART 2:

	Reviewer's comment	**Author's comment** *(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Are there ethical issues in this manuscript?	*(If yes, Kindly please write down the ethical issues here in details)*	

Reviewer Details:

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