

Review Form 3

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|--------------------------|---|
| Journal Name:            | Journal of Energy Research and Reviews  |
| Manuscript Number:       | Ms_JENRR_131048   |
| Title of the Manuscript: | SOLAR RADIATION VERY SHORT-TERM FORECASTING ON ADAPTIVE SOLAR CELLS USING HYBRID MODEL DECOMPOSITION FEED FORWARD NEURAL NETWORK METHOD |
| Type of the Article      | Original Research Article   |

PART 1: Comments

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|  | <b>Reviewer's comment</b><br>Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.  | <b>Author's Feedback</b> (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. | The study presents a novel hybrid decomposition-feedforward neural network (D-FFNN) model for short-term solar radiation forecasting. It enhances adaptive solar cell efficiency, contributing significantly to renewable energy research.   |   |
| Is the title of the article suitable? (If not please suggest an alternative title)   | The title is too long. Suggested alternative: "Short-Term Solar Radiation Forecasting for Adaptive Solar Cells Using a Hybrid D-FFNN Model."   |   |
| 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.      | Clear but could be more concise. Suggest specifying how the model compares to existing methods and refining the discussion of future work.   |   |
| Is the manuscript scientifically, correct? Please write here.  | Methodology and results are well-structured. Clarifying how environmental factors like cloud cover were considered would strengthen the study.   |   |
| Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.                              | Sufficient and recent. Adding comparisons with Transformer-based models or physics-informed neural networks would be beneficial.   |   |
| Is the language/English quality of the article suitable for scholarly communications?  | The language is mostly suitable for scholarly communication, but there are areas where clarity can be improved: <ul style="list-style-type: none"><li>Some sentences are lengthy and could be rewritten for better readability.</li><li>Minor grammatical errors and awkward phrasing appear throughout the text (e.g., "It can be stated that despite the variation..." could be revised to "Despite some variation, the model demonstrates high accuracy...").</li><li>The manuscript could benefit from professional proofreading to enhance its readability and academic tone.</li></ul> |   |
| Optional/General comments  | <input type="checkbox"/> A comparison table with other forecasting models would be helpful.<br><input type="checkbox"/> Figure captions need more explanation.<br><input type="checkbox"/> Discussing real-world implementation challenges would add depth.  |   |

PART 2:

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|  | <b>Reviewer's comment</b>   | <b>Author's comment</b> (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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|----------------------------------|---|
| Name:                            | K. Madumathi  |
| Department, University & Country | Mahendra Institute Of Technology (autonomouss), India |