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**Paper: “Machine Learning Techniques in Residential Electrical Load Forecasting: A PRISMA Review with LLM-Assisted Screening and Evidence Extraction”**

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Peer review:

Reviewer 1: Xi Chen  
University of California, Santa Cruz, USA

Reviewer 2: Daniel B. Hier  
Missouri University of Science and Technology, USA

# ***ESJ Manuscript Evaluation Form 2026***

This form is designed to summarize the manuscript peer review that you have completed and to ensure that you have considered all appropriate criteria in your review. Your review should provide a clear statement, to the authors and editors, of the modifications necessary before the paper can be published or the specific reasons for rejection.

Please respond within the appointed time so that we can give the authors timely responses and feedback.

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Reviewer Name: Xi Chen	
University/Country: University of California Santa Cruz	
Date Manuscript Received: 01-23-2026	Date Review Report Submitted: 01-23-2026
Manuscript Title: Machine Learning Techniques in Residential Electrical Load Forecasting : PRISMA Literature Review	
ESJ Manuscript Number: 49.01.2026	
You agree your name is revealed to the author of the paper: Yes	
You approve, your name as a reviewer of this paper, is available in the “review history” of the paper: You approve, this review report is available in the “review history” of the paper: Yes	

## **Evaluation Criteria:**

**Please give each evaluation item a numeric rating on a 5-point scale, along with a thorough explanation for each point rating.**

<b><i>Questions</i></b>	<b><i>Rating Result</i></b> [Poor] 1-5 [Excellent]
<b>1. The title is clear and it is adequate to the content of the article.</b>	<b>5</b>

<p><b>The title is clear, specific, and accurately reflects the scope and methodology of the paper. It explicitly communicates the domain (residential electrical load forecasting), the methodological focus (machine learning techniques), and the review framework (PRISMA). There is strong alignment between the title and the paper’s actual content, including the emphasis on systematic review and screening methodologies.</b></p>	
<p><b>2. The abstract presents objectives, methods, and results.</b></p>	<p><b>5</b></p>
<p><b>The abstract is comprehensive and well-structured. It clearly states the study objective, describes the PRISMA-based methodology, outlines data sources and screening stages, and summarizes key results, including the number of included studies and identified research gaps. The inclusion of the novel hybrid screening pipeline and LLM analysis strengthens the abstract’s contribution and clarity.</b></p>	
<p><b>3. There are a few grammatical errors and spelling mistakes in this article.</b></p>	<p><b>4</b></p>
<p><b>Overall, the manuscript is well written and technically precise. However, there are minor grammatical inconsistencies, punctuation issues, and occasional stylistic problems (e.g., spacing around citations, inconsistent capitalization, occasional awkward phrasing). These issues do not impede understanding but would benefit from careful copyediting.</b></p>	
<p><b>4. The study methods are explained clearly.</b></p>	<p><b>5</b></p>
<p><b>The methods section is exceptionally detailed and transparent. The eligibility criteria, data sources, search strategy, multi-stage screening process, semantic models, LLM usage, and hybrid classification approach are thoroughly explained. Equations, decision logic, and validation steps are clearly described, enabling reproducibility and critical appraisal.</b></p>	
<p><b>5. The results are clear and do not contain errors.</b></p>	<p><b>4</b></p>
<p><b>The results are logically structured, well supported by figures and tables, and consistently aligned with the stated research questions. Numerical counts across PRISMA stages are mostly consistent. However, the density of information (especially in screening disagreement analysis) may overwhelm some readers, and clearer cross-referencing between text, tables, and figures would improve readability.</b></p>	
<p><b>6. The conclusions or summary are accurate and supported by the content.</b></p>	<p><b>5</b></p>
<p><b>The conclusions accurately synthesize the findings and are well supported by the review results. Claims regarding dominant model types, evaluation metrics, geographical imbalance, reproducibility challenges, and emerging trends are directly grounded in the presented analysis. The limitations of LLM-assisted screening are appropriately acknowledged.</b></p>	
<p><b>7. The references are comprehensive and appropriate.</b></p>	<p><b>5</b></p>
<p><b>The reference list is extensive, up-to-date, and highly relevant. It includes a broad range of Q1/Q2 journals and reputable conferences, covering classical methods, deep learning, federated learning,</b></p>	

probabilistic forecasting, and systematic review methodology. Citation breadth and depth are appropriate for a state-of-the-art review.

**Overall Recommendation** (mark an X with your recommendation) :

Accepted, no revision needed	
Accepted, minor revision needed	<b>X</b>
Return for major revision and resubmission	
Reject	

**Comments and Suggestions to the Author(s):**

1. Perform a light grammatical and stylistic revision to improve clarity and consistency.
2. Consider adding a concise summary table or schematic that visually consolidates the hybrid screening workflow and decision logic.
3. Improve figure and table cross-referencing within the Results section to reduce cognitive load for readers.
4. Explicitly clarify any minor numerical discrepancies across screening stages to further strengthen methodological rigor.

**Comments and Suggestions to the Editors Only:**

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Reviewer Name: Daniel B. Hier MD	
University/Country: USA	
Date Manuscript Received: January 23, 2026	Date Review Report Submitted: January 25, 2026
Manuscript Title: <b>Machine Learning Techniques in Residential Electrical Load Forecasting : PRISMA Literature Review</b>	
ESJ Manuscript Number: 49.01.26	
You agree your name is revealed to the author of the paper: Yes	
You approve, your name as a reviewer of this paper, is available in the “review history” of the paper: You approve, this review report is available in the “review history” of the paper:	

#### Evaluation Criteria:

Please give each evaluation item a numeric rating on a 5-point scale, along with a thorough explanation for each point rating.

<i>Questions</i>	<i>Rating Result</i> [Poor] 1-5 [Excellent]
<b>1. The title is clear and it is adequate to the content of the article.</b>	<b>5</b>
<i>I would suggest that the author consider adding is novel contribution to the title which was his use of LLMs for evidence extraction and article screening such as “Machine Learning Techniques in Residential Electrical Load Forecasting: A PRISMA Review with LLM-Assisted Screening and Evidence Extraction.”</i>	

<b>2. The abstract presents objectives, methods, and results.</b>	<b>4</b>
<i>(Please insert your comments)</i>	
<b>3. There are a few grammatical errors and spelling mistakes in this article.</b>	<b>4</b>
<i>A careful proof reading of the article for spelling and grammatical errors is still needed.</i>	
<b>4. The study methods are explained clearly.</b>	<b>4</b>
<i>Methods are clearly described.</i>	
<b>5. The results are clear and do not contain errors.</b>	<b>4</b>
<i>Results are clearly described.</i>	
<b>6. The conclusions or summary are accurate and supported by the content.</b>	<b>4</b>
<i>Conclusions are appropriate.</i>	
<b>7. The references are comprehensive and appropriate.</b>	<b>4</b>
<i>References are appropriate</i>	

**Overall Recommendation** (mark an X with your recommendation) :

Accepted, no revision needed	
Accepted, minor revision needed	<b>x</b>
Return for major revision and resubmission	
Reject	

**Comments and Suggestions to the Author(s):**

**Please carefully proof read the entire article and correct any outstanding spelling or grammatical errors. The novel methodology used in the screening and extraction process for this review should be mentioned in the title to gain the recognition you deserve. This is still an emerging method change and even though you are not the first it is worth mentioning in the title.**