

Dear Mr. Tarazi:

I write you in regards to manuscript # TCPS-2024-0025 titled "Digital Relays Resilience for Physics-Based Cyber Attacks in Smart Grids : A Survey" which you submitted to the Transactions on Cyber-Physical Systems.

In view of the criticisms of the reviewer(s) found at the bottom of this letter, your manuscript has been denied publication in the Transactions on Cyber-Physical Systems.

Thank you for considering the Transactions on Cyber-Physical Systems for the publication of your research. I hope the outcome of this specific submission will not discourage you from the submission of future manuscripts.

Sincerely,  
Prof. Chenyang Lu  
Editor-in-Chief, Transactions on Cyber-Physical Systems  
lu@cse.wustl.edu

Associate Editor Comments to Author:

Associate Editor  
Comments to the Author (Required):  
Dear authors

Thanks for submitting the paper to TCPS. We have some constructive comments and hope to help the authors to improve for other adventures.

Reviewer(s)' Comments to Author:

Reviewer: 1

Comments to the Author

This paper provides a concise survey of the resilience of digital relays against physics-based cyber-attacks in smart grids. It covers research challenges, detection methods, machine learning approaches, and outlines directions for future research. Here are the reviewers' comments:

1. It would be beneficial to discuss any existing survey papers in this area and highlight the unique contributions of this paper in comparison to those surveys.
2. Figure 1 needs improvement in quality and size adjustment.
3. Including some mathematical equations to explain the studied problems is recommended.
4. It would be useful to discuss the differences between detection and machine learning-based approaches.
5. A table organizing all the survey papers by key features is suggested for better clarity.

Reviewer: 2

Comments to the Author

This article aims to provide a survey on the state-of-the-art digital relays resilience for physics-based cyber attacks in

Smart Grids. This reviewer has the following major concerns:

1. Insufficient detail: The manuscript is very short (8 pages as a review/survey article). The discussion and review provided are quite brief and do not cover the necessary aspects of the subject comprehensively.

Please refer to published review/survey papers, for example

<https://www.sciencedirect.com/science/article/pii/S1084804522001813>

2. Lack of references: This article lacks sufficient references to support the assessments and suggestions. Including relevant references is crucial for substantiating your points and providing the authors with a robust framework to understand and act on the feedback. Common review papers in this domain should have at

least 80 references.

3. Structure issues: The review does not follow the proper structure expected of a review article. Please refer to the literature for the appropriate organization of a review article.