Review of: "Evaluation of Reliability and Financial Feasibility of Various EV Charging Station Layouts"

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Potential competing interests: No potential competing interests to declare.

The first review of a manuscript with the Qeios ID OF5LF5, entitled " Assessing Reliability and Economic Viability of Different EV Charging Station Configurations,"

Section/Category: Fuel Cells & Applications

During the first review of the paper, my general and main comments are as follows:

1. There are more and more errors in the standard of English (and other typo errors/mistakes), and then the authors should proofread the paper carefully.
2. Very important note: remove all pronouns from the paper.
3. The abstract section should contain more results. Also, the abstract must be shortened.
4. I noticed that the authors do not cite the journal. I recommend making a citation of the journal for at least one-third of the total references.
5. On what criteria did the authors select this type of electric vehicle?
6. Where are the technical specifications of the equipment used?
7. The discussion section is very short compared to the obtained results. Please go through it and add more comments and interpretations.
8. Please clearly mention the novelty of this work in the main parts of the article (introduction, method, results, and conclusion sections).
9. I recommend adding the following papers to the literature review and introduction section: -

M. M. Samy, M. I. Mossad and S. Barakat, " Reliability Support of Undependable Grid Using Green Energy Systems; Economic Study," IEEE Access Journal Vol. 9, Pp., 14528- 14539, 2021.

M. M. Samy, S. Barakat, and M. I. Mossad, " Optimal Economic Study of Hybrid PV-Wind-Fuel Cell System Integrated to Unreliable Electric Utility Using Hybrid Search Optimization Technique," International Journal of Hydrogen Energy (IJHE), Vol. 46, No. 20, Pp, 11217-11231, 19 March 2021.

Charafeddine Mokhtara, Belkhir Negrou, Noureddine Settou, Belkhir Settou, and Mohamed Mahmoud Samy, " Design Optimization of Off-grid Hybrid Renewable Energy Systems Considering the Effects of Building Energy Performance and Climate Change: Case Study of Algeria Energy," Energy, the International Journal (Elsevier), Volume 219, 15 March

2021, 119605.

M. B. Eteiba, S. Barakat, M. M. Samy, and W. I. Wahba, “Optimization of an Off-Grid PV/Biomass Hybrid System with Different Battery Technologies,” Sustain. Cities Soc., 2018.

M. M. Samy, and S. Barakat, “Hybrid Invasive Weed Optimization - Particle Swarm Optimization Algorithm for Biomass/PV Micro-grid Power System,” The 21st International Middle East Power Systems Conference (MEPCON), Tanta University, Egypt, December 17-19, pp. 377–382, 2019.

M. M. Samy, S. Barakat, and H. S. Ramadan, “Techno-economic analysis for rustic electrification in Egypt using multi-source renewable energy based on PV/wind/FC,” Int. J. Hydrogen Energy, vol. 45, no. 1, pp. 11471–11483, 2020.

M. M. Samy, Heba I. Elkhouly and S. Barakat, " Multi-Objective Optimization of Hybrid Renewable Energy System Based on Biomass and Fuel Cells " International Journal of energy research, Vol. 45, No. 6, May 2021.

S. Barakat, A. Emam, and M. M. Samy, " Investigating grid-connected green power systems' energy storage solutions in the event of frequent blackouts," Energy Reports Journal (Elsevier), Vol. 8, Pp., 5177-5191, November 2022.

Aykut Fatih Guven, Nuran Yorukeren and M. M. Samy "Design Optimization of a Stand-Alone Green Energy System of University Campus Based on JAYA-Harmony Search and Ant Colony Optimization Algorithms Approaches" Energy Journal (Elsevier), 253 (2022) 124089 2022, DOI: https://doi.org/10.1016/j.energy.2022.124089.

M. M. Samy, Rabia Emhamed Almamlook, Heba I. Elkhouly and S. Barakat, "Design Decision-Making and Optimal Design of Green Energy System Based on Statistical Methods and Artificial Neural Network Approaches" Sustainable Cites and Society Journal (Elsevier), Vol. 84, September 2022, 104015, https://doi.org/10.1016/j.scs.2022.104015.

M. M. Samy, A. Emam, Elsayed Tag-Eldin, and S. Barakat, "Exploring energy storage methods for grid-connected clean power plants in case of repetitive outages"Journal of Energy Storage 54 (2022) 105307, DOI: https://doi.org/10.1016/j.est.2022.105307.

Aykut Fatih Guven, and M. M. Samy "Performance analysis of autonomous green energy system based on multi and hybrid metaheuristic optimization approaches"Energy Conversion and Management 269 (2022) 116058, DOI: https://doi.org/10.1016/j.enconman.2022.116058

Abdeldjalil Djouahi, Belkhir Negrou, Boubakeur Rouabah, Abdelbasset Mahboub and Mohamed Mahmoud Samy, " Optimal Sizing of Battery and Super-Capacitor Based on the MOPSO Technique via a New FC-HEV Application", Energies 2023, 16(9), 3902; https://doi.org/10.3390/en16093902.

Abdeldjalil Djouahi, Belkhir Negrou, Touggui Youssef, and Mohamed Mahmoud Samy, "Incorporating the best sizing and a new energy management approach into the FC-HEV design," accepted in the Energy and Environment Journal, 29-4-2023, https://doi.org/10.1177/0958305X231177743 ;

Abdeldjalil Djouahi, Belkhir Negrou, Y. Touggui, and Mohamed Mahmoud Samy, "Optimal sizing and thermal control in a

fuel cell hybrid electric vehicle via FC-HEV application," Journal of the Brazilian Society of Mechanical Sciences and Engineering 45, 533 (2023). https://doi.org/10.1007/s40430-023-04437-x

Nahar F. Alshammari, Mohamed Mahmoud Samy, and Shimaa Barakat, “Comprehensive Analysis of Multi-Objective Optimization Algorithms for Sustainable Hybrid Electric Vehicle Charging Systems,” Mathematics 2023, 11, 1741. https://doi.org/10.3390/math1107174.

1. All figures must be cleared (enlarge) and improved.
2. The references must be updated to the year 2024.
3. The whole paper must be rewritten again.