

Dear Dr. Azim Eskandarian,

My colleagues and I are grateful for the opportunity to revise our paper. The reviewers have provided excellent feedback which we have utilized to improve the quality of the manuscript. Our response to each reviewer comment appears below. The reviewer comments are given in the red format and our responses are in blue.

Reviewer 1

The comments for reviewer 1 are addressed here:

1. **Reviewer:** **Reject (No comments).**

Response: It looks like Reviewer 1 recommended that our paper be rejected. If there are any additional comments that this review has we are happy to address them.

Reviewer 2

The comments for reviewer 2 are addressed here:

1. **Reviewer:** **Accept.**

Response: Reviewer 2 did not give any further recommendations. If there are any changes please let us know!

Reviewer 3

The comments for reviewer 3 are addressed here:

1. **Reviewer:** For the system model, the main innovation is that the uncontrolled power loads are considered. However, in Section I, we cannot find the detailed expressions about the uncontrolled loads. Please add more references and practical example to express it, to make the manuscript more readable.

Response: Thank you for the feedback, we have added a description of the uncontrolled loads in this paper and their unmanaged effects on the monthly cost.

2. **Reviewer:** In the system model, the bus may be overlaped in the charging station. Actually, in my opinion, the control center can schedule the charging orderly. More expressions are needed.

Response: not sure what this means...

3. **Reviewer:** In Section III, why the bin packing approach is suitable for the needs in this manuscript?

Response: Great question, Section III includes details that manage the state of charge for each bus. This paper addresses constraints that maintain a bus's state of charge which drive the delivery of energy during charge sessions. Each charge session can be thought of as a "bin" where the bin width is time, and the minimum width is based on how much energy the bus must receive during the session.

4. **Reviewer:** For the simulation, the authors should give more comparison with the current existing works, to make the effectiveness more clearly.

Response: Thank you for the feedback! We have added an additional comparison in Section V. The new comparison shows how our method compares to an approach used by Ojer et al. which focuses on managing the peak energy without considering uncontrolled loads. The method we have already included by He et al. focuses on minimising the cost from time of day tariffs. Between Ojer et al. and He et al. we believe the comparisons should demonstrate the effectiveness over a range of related methods.

5. **Reviewer:** The paper writing should be improved. For example, in page 9 , line 49, section ??

Response: Great catch, we have revised the manuscript to remove additional imperfections.

Reviewer 4

The comments for reviewer 4 are addressed here:

1. **Reviewer:** Simply removing references does not justify the motivation. I recommend the below three papers.

- He, J., Yan, N., Zhang, J., Wang, T., 2022. Battery electric buses charging schedule optimization considering time-of-use electricity price. *Journal of Intelligent and Connected Vehicles*, 4(2), 138-145
- Liu, Y., Wang, L., Zeng, Z., Bie, Y., 2022. Optimal charging plan for electric bus considering time-of-day electricity tariff. *Journal of Intelligent and Connected Vehicles*, 5(2), 123-137.
- Ji, J., Bie, Y.M., Zeng, Z., Wang, L., 2022. Trip energy consumption estimation for electric buses. *Communication in Transportation Research* 2, 100069.

Response: Thank you, we have updated the focus of our paper so that the primary motivation centers on cost savings from uncontrolled loads.

2. **Reviewer:** The authors need to carefully describe the charging activities for each BEB bus in a day.

Response: We have included an addiitonal paragraph in the introduction which describes the daily BEB activity.