Interactive comment on “Rapid evaluation of water supply project feasibility in Kolkata, India” by K. Dutta Roy et al.

Anonymous Referee #1

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This is an interesting manuscript, where a cost capacity benefit analysis has been performed and directions for optimal improvements for water supply system is provided. I have some specific points about this article.

1. The writeup of the paper is extremely poor. It seems that more space is devoted to literature review (almost 75-80%) and very less space is provided for the technical contribution. This should be changed. More technical details of the present contribution should be presented. It is also extremely difficult to follow the paper. This reviewer suggests to add a figure in introduction which gives the overall flowchart of the methodology developed.

2. I do not any need to use ANN. The authors have the capacity cost curve in their hand. The best practice is to use the curve directly. If at all there is a need to regress a
parabolic curve fitting (which the figure shows) will work better and there is absolutely no need to train an ANN. Where is the structure of ANN? How many structures have been used to select the best? Where are testing and validation? Without testing and validation an ANN model can not be used. The training is performed with a data set of very less sample size. This is mathematically incorrect. This should be properly done.

3. In abstract the authors have mentioned about Monte Carlo simulation. But I do not see the applications of Monte Carlo simulation in this present manuscript. How many simulations they have used, where are the results? more details are required. It should be remembered that sensitivity analysis is different from Monte Carlo Simulation.