



SDI Review Form 1.6

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	2014_BJAST_10958
Title of the Manuscript:	Prediction of Electrical Power Demand of Bayelsa State (Nigeria) by year 2025 Using Improved Estimate Method
Type of the Article	

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	The topic “ Prediction of electrical power demand of Bayelsa state (Nigeria) by year 2025 using improved estimate method” Which improved method are you proposing because the number of method used in the paper are apparently more than one. The topic should have read “ comparative analysis for prediction of electrical power demand of Bayelsa state” Line 24-26 It will be possible if..... I think this is the problem this paper is trying to address. None of these were presented in the results. Line 37 collection of data from actual plan..... What data were collected? Was it monthly, daily or yearly? Let us know Line 40 what kind of simulation and was this carried out? Line 42.... Values of daily parameters.... which parameters? Line 47.....A variety of models... why variety of models? Line 95 table 1: define the variables y, x2 xy Line 101: same as table 1 Line 103: why the choice of 2025? Figure 2: if all the hourly data were used for this plot, “Microsoft excel” will have given you a better linear	Topic has been changed to “Comparative Analysis for Prediction of Electrical Power Demand of Bayelsa State by year 2025”. See page 1 Paper is comparing accuracy of different methods of Load prediction. 1. Daily load consumption data. 2. Monthly load consumption data obtained from log sheets from Power supply authorities. 1. Daily Peak load Demand. 2. Population growth. To compare accuracy of models suitable to be used here. Y=Actual peak load demand. X=Year under study. XY= Product of X and Y. Standard bench-mark for construction of major plants is 10yrs. Long term forecast is necessary for this new state. Ref 11 has considered yr2020.



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	equation to predict the future. Line 111: appropriate way??? Which appropriate way? Line 112: your simulated data may have introduced the outlier!!!! Fig 3: yaxis label should be “electrical demand (MW)”. Ditto for all other figs. Line 313: between 6am – 9am..... this was not determined or calculate or discussed anywhere in the main paper!!!	No. Ok. Y-axis has all been properly labelled as suggested (see figs.3 – 7) Discussed in page 10 after table 5. Data obtained from load demand logs.
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<u>Minor</u> REVISION comments								
<u>Optional/General</u> comments	You can improve on this work by noting and working on the following: 1. Which time of the day do you have peak electrical demand 2. which period of the year do you have peak demand 3. What are the reasons for the above. 4. Would the reasons give in 3 persist for the next 20 years? If these questions were not addressed, the best of the “model” will breakdown. It is noted that your models predicted increased value of electrical demand for Bayelsa in the future, what other factors are in involved. 1. High population? 2. More industries coming? 3. Change in climate? 4. Etc, etc. Please explain your prediction in terms of these factors. You can also make a summary table with the following columns <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <tr> <th style="padding: 2px 10px;">Method</th> <th style="padding: 2px 10px;">Fp</th> <th style="padding: 2px 10px;">Error</th> </tr> <tr> <td style="height: 20px;"></td> <td></td> <td></td> </tr> </table> You dwelled too much on the mathematical formulation of the methods. These are well known mathematics and it is waste of space trying to put them on this paper. Overall, the concept of the paper is good but the approach to getting results is very disappointing.	Method	Fp	Error				Peak loads occur between 6am-9am and 6pm-9pm. Peak demand occur during the summer (Dry) season (Sept – December)’ The dry season is usually very hot (Tropical climate). Air-conditioners, other cooling and ventilating devices are extensively used. Traditional ceremonies are usually slated for these periods. 1. Yes influx of people from neighbouring state increase the population. 2. More industries are being stationed there and new ones propose. It is a major oil producing state. 3. These factors have been considered.
Method	Fp	Error						