

Berikut adalah bukti korespondensi yang diambil dari email pengiriman artikel ke Jurnal ""TELKOMNIKA":

On Tue, Jun 14, 2011 at 8:28 AM, MUHAMMAD IRWANTO MISRUN
<irwanto@unimap.edu.my> wrote:

Dear Prof/Dr/Mr Tole Sutikno
Editor-in-Chief, TELKOMNIKA

I send a full paper entitle " Potential of Wind Speed for Wind Power Generation
In Perlis, Northern Malaysia " to be reviewed by this journal's reviewer.
Please get it in attachment.

Best regard
Muhammad Irwanto
PhD Student, Electrical system Engineering
Universiti Malaysia Perlis (UniMAP)

On Wed, Jun 15, 2011 at 1:17 AM, Jurnal Telkomnika <telkomnika@ee.uad.ac.id> wrote:

Dear **Mr. Muhammad Irwanto**,

We have received your paper the above submitted for possible publication in the TELKOMNIKA Journal. This paper is being forwarded to our editorial reviewers and I shall let you know the decision regarding this publication, normally within 6-8 weeks.

I assume that the manuscript you submitted has not been published, scheduled to be published, or is not currently under review for publication elsewhere. If this is not the case, please notify our office and/or me immediately.

We thank you for your interest in publishing your work in the TELKOMNIKA Journal.

Sincerely yours,

Tole Sutikno
Editor, TELKOMNIKA Journal
<http://telkomnika.ee.uad.ac.id>
thsutikno@ieee.org

Dear **Mr. Muhammad Irwanto**,

The reviewing process of your paper, entitled "Potential of Wind Speed for Wind Power Generation In Perlis, Northern Malaysia" has been completed. Based on the opinions of the reviewers and the associate Editor in charge, your manuscript **requires a revision** before it can be accepted for publication in the TELKOMNIKA Indonesian Journal of Electrical Engineering (ISSN: [1693-6930](http://www.telkomnika.com), pISSN: 2087-278X). The reviewer comments are attached, and A. Editor Comments is included at the bottom of this letter.

Please revise your manuscript accurately according to the attached reviewers' comments. Please be kindly noted, manuscripts **should** be technically linked with some other **recently** published papers of the journal where the manuscript is submitted to. Highlight, or somehow mark, any changes so that the revision can be readily assessed. You should also include a response to the reviewer remarks indicating how you have addressed the concerns. This response can be prepared in a separation file at the time of revision.

Please you to undertake **revisions** and re-submit, addressing the referees' concerns **within six (6) weeks**. Your revised manuscript will be evaluated again by the Associate Editor having handled your paper.

Because we are trying to facilitate timely publication of manuscripts submitted to TELKOMNIKA Journal, your revised manuscript should be submitted as soon as possible. The first priority of manuscripts which will be published publication in December 2011 is first accurately revised manuscripts. The papers which are suitable, but they are not possible to be published in December 2011, will be scheduled for forthcoming issue.

I look forward to a revision. Your kind cooperation will be greatly appreciated.

Sincerely yours,
Tole Sutikno
Editor-in-Chief

TELKOMNIKA: Indonesian Journal of Electrical Engineering

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Reviewer(s)' Comments to Author:

Reviewer #1:

Attached

Reviewer #2:

Attached

Reviewer #3:

-

A. Editor:

In my opinion, the manuscript has some value because it presents actual results of measurement and characterization of wind speed in Perlis, although the data processing and analysis methods are completely standard. If the article is modified and corrected according to reviewer suggestions, I think it will result in an acceptable work. For the researchers in this field, who wonder if the employment of wind turbines in Perlis is profitable, the article can provide some interesting information.

others:

- a) The Abstract should be informative and completely self-explanatory, provide a clear statement of the problem, the proposed approach or solution, and point out major findings and conclusions.
- b) Authors are suggested to present their articles in the section structure: **Introduction - The Proposed Method/Algorithm (optional) - Research Method - Results and Discussion - Conclusion.**
- c) The author is also suggested to describe the real problem existing (to be listed in the References) in “introduction section” in order to satisfy the criteria of this scientific journal which has to introduce any novelties, improvement etc from the research work prior to the problem solving done or proposed by the author as a significant contribution. This critical point is available in the guideline for the author provided by the Editor.

- d) The results of research and analysis are NOT incisively provided in the paper. You should improve your analyzing and also present the comparison between performance of your approach and other researches. It is very important to prove that your manuscript has a significant value and not trivial.
- e) The references must be integrated also with not less than two papers published on our Journal. You can find some papers in the website of TELKOMNIKA.
- f) Highlight, or someway mark, any changes so that the revision can be readily assessed. You should also include a response to the reviewer remarks indicating how you have addressed the concerns. This response can be prepared in a separation file at the time of revision.

RESPONSE TO REVIEWERS

Title of manuscript : Potential of Wind Speed for Wind Power Generation In Perlis, Northern Malaysia

Authors :I. Daut, M. Irwanto, Suwarno, Y.M. Irwan, N. Gomesh, N. S. Ahmad

Response to Reviewer #1 (MGC):

1. The drafting of the manuscript must be revised as it has some grammatical and orthographic errors. For example, in the title of Fig. 2 and Fig. 18 the wind generator (or wind turbine) is misnamed as “wind power generation”. In the Abstract: “This paper presents (an) analysis of the..... “. In the Section 3.4: "the wind speed is applied to the wind power generation". (Who apply the wind speed?). Electroorder is incorrectly written.

Response:

- in the title of Fig. 2 and Fig. 18 the wind generator (or wind turbine) is misnamed as “wind power generation”.

Response:

All wind turbine has been changed to be wind power generation (it follows paper title)

- In the Abstract: “This paper presents (an) analysis of the..... “.

Response:

Word “an” has been put before analysis

- In the Section 3.4: "the wind speed is applied to the wind power generation". (Who apply the wind speed?).

Response:

To be good sentence and no miss understand, the sentence has been changed become” The wind spins blade of the wind power generation and produces DC electricity”.

- Electroorder is incorrectly written.

Response:

Electroorder is type (trademark) of DC voltage logger, therefore the spelling likes that. Now, Electroorder has been removed and replaced to the DC voltage logger.

2. It is true that the shape parameter k of the Weibull distribution function can be estimated using the Justus approximation, Equation (3) of the article. Then, the value of the scale parameter c can be found with the Equation (4). But to do this, you must know in advance the mean value and the standard deviation of the wind speed. It seems to me reasonable that equations to calculate these quantities should be included in the article. The Equations (5) and (6) that are presented in the article are useful for the reverse case, when the Weibull parameters are known. I propose the replacement of these equations by the following ones:

$$\bar{v} = \frac{1}{n} \sum_{i=1}^n v_i \quad (5)$$

$$\sigma = \sqrt{\frac{1}{n-1} \sum_{i=1}^n (v_i - \bar{v})^2} \quad (6)$$

Response:

I have put the value of shape parameter, k of 2.49, scale parameter, c of 1.24 m/s, standard deviation, σ of 0.4757 and its wind speed is 1.01 m/s (mean wind speed value) in the paper.

I have replaced equation (5) and (6) according to your suggestion.

3. In Equations (3) and (4) should be defined which is Γ (Gamma function).

Response:

It is has been corrected.

4. Add space between text and equation (6).

Response:

It is has been corrected.

5. In Section 3.3 the numerical values of the monthly mean power density cited in the text do not match those in Figure 5a.

Response:

It is has been corrected (same with the second reviewer's correction).

6. Figure 18 should be called Figure 7. It is also misnamed as Fig. 19, in the Section 3.4.

Response:

It is has been corrected.

7. The comment in the Section 3.4 concerning the output voltage of the wind turbine (shown in Figure 18), should be changed because if you add a DC/DC converter to the output of the generator (a very common practice), a voltage of 24V could be obtained even if the generator voltage is below that value. I believe that this test does not give

any interesting information and must be replaced by another one. For example the instantaneous electrical power generated by the wind turbine as function of time. Then, you may calculate its daily mean value. The authors should specify if the wind generator is connected to a battery bank or a passive load, as the operation is different for each case.

Response:

The wind power generation is connected to a resistor of 10 ohm (rating power = 1 W and rating voltage = 500 V). Therefore the current flows through the resistor as shown in Figure 7(b).

8. Although the authors show in Figure 6 the wind speed measured on a particular day with relatively favorable wind condition, for most of the year the wind resource in Perlis is very scarce. The wind speed trough the entire year is very low (see Figure 3a), including at the beginning and the end of year, which show somewhat higher values. It is normally below the start-up wind speed of most commercial wind turbines (typically between 2 and 3m/s). Therefore, the Conclusion section should include a comment on that, because for this particular case would be necessary the development of a special wind turbine capable of harnessing the little wind resource available in Perlis. The authors say: “it is important to choose a suitable wind turbine”, but this is virtually impossible because any commercially available wind turbine would not work satisfactorily in these conditions (at least, I do not know any that could do it).

Response:

- Although the authors show in Figure 6 the wind speed measured on a particular day with relatively favorable wind condition, for most of the year the wind resource in Perlis is very scarce.

Response:

The wind speed data for the year of 2006 (see Figure 3a) is measured by the meteorological station in Chuping, Perlis, Northern Malaysia as mentioned in section 3.1, paragraph 1, line 1 and 2. The station recorded the hourly wind speed, sometime the value is very low and the daily wind speed is obtained from the hourly average wind speed for 24 hours. Therefore the wind speed data is low.

Vantage Weather Station Pro2 has been installed in the last February 2011 in front of Electrical Energy and Industrial Electronic System (EEIES) cluster (EEIES cluster station), in Kangar, Perlis. Its condition is very good (new weather station). The weather station records wind speed data every minute. Using the station, the high wind speed can be observed (see Figure 6).

- The wind speed trough the entire year is very low (see Figure 3a), including at the beginning and the end of year, which show somewhat higher values. It is normally below the start-up wind speed of most commercial wind turbines (typically between 2 and 3m/s). Therefore, the Conclusion section should include a comment on that,

because for this particular case would be necessary the development of a special wind turbine capable of harnessing the little wind resource available in Perlis.

Response:

It has been mentioned in section 3.2 and conclusion.

The authors say: “it is important to choose a suitable wind turbine”, but this is virtually impossible because any commercially available wind turbine would not work satisfactorily in these conditions (at least, I do not know any that could do it).

Response:

According to reviewer’s suggestion, it has been removed and to be a sentence “it is necessary to develop a special wind power generation capable of harnessing the little wind resource available in Perlis.

9. Even considering that the wind energy potential is higher at the begin (January to March) and at the end (December) than at the middle of year, it is still very poor in absolute terms. The Abstract must reflect this fact. Change the redaction of the sentence regarding the analysis of the results.

In the Abstract, change the sentence “it is important to choose a suitable wind turbine” for a more appropriate one according to my comments in (8).

Response:

It has been corrected.

Response to Reviewer #2 (YH):

1. Abstract: page 1 line 6 enrgy should be energy

Response:

It is has been corrected.

2. Section 2.3 page 4, equation 10

I didn’t understand why for year, the time period T is taken equal to 8640 h? although 1 year = 8760 hours.

Response:

In this paper 8640 h is referred on [6] Dahmouni AW, Salah MB, Askri F, Kerkeni C, Nasrallah SB. Wind energy in the Gulf of Tunis, Tunisia. *Renewable and Sustainable Energy Reviews*. 2010; 14: 1303-11.

I also agree your suggestion, therefore I add a sentences “or 8760 h if 365 days in year is required”.

3. Section 3.3 page 6 line 4 The highest monthly mean wind power density is 3.8847 W/m² occurs in February not in January and the lowest one is 0.2367 W/m² occur in May not in July.(Please check again figure 5 (a) and figure 5 (b)), it should be typo or error.

Response:

It is has been corrected.

Response to A. Editor:

The references must be integrated also with not less than two papers published on our Journal. You can find some papers in the website of TELKOMNIKA.

Response:

Two papers have been referred in this paper