

**LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW
KARYA ILMIAH : JURNAL ILMIAH**

Judul Jurnal Ilmiah (Artikel) : Improving the MW-Mile method based on power factor approach for pricing in the transmission services
 Penulis Jurnal Ilmiah : Syarifuddin Nojeng ; Mohammad Yusri Hassan ; Dalia Mat Said ; Md. Pauzi Abdullah ; Faridah Hussin

Identitas Jurnal Ilmiah : a. Nama Jurnal : IEEE Transaction on Power Systems
 b. Nomor/Volume : 29 / 5
 c. Edisi (bulan/tahun) : September 2014
 d. Penerbit : IEEE / PES
 e. Alamat web jurnal : <https://ieeexplore.ieee.org>
 f. DOI jurnal : [10.1109/TPWRS.2014.2303800](https://doi.org/10.1109/TPWRS.2014.2303800)
 g. Indeks Jurnal : SJR Scimagojr/ Thomson Reuter/ Scopus Web of Science (Impact Factor = 5,1), Q1

Kategori Publikasi Jurnal Ilmiah (beri pada kategori yang tepat) : Jurnal Ilmiah Internasional Bereputasi
 Jurnal Ilmiah Nasional Terakreditasi
 Jurnal Ilmiah Nasional Tidak Terakreditasi

Hasil Penilaian Peer Review : Nilai max = $0.6 \times 40 = 24$

Komponen Yang Dinilai5)	Nilai Maksimal Jurnal Ilmiah			Nilai Akhir Yang Diperoleh
	Internasional	Nasional Terakreditasi	Nasional Tidak Terakreditasi	
a. Kelengkapan unsur suatu Artikel Ilmiah(10%)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2.4
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d. Kelengkapan unsur dan kualitas penerbit (30%)	12			7.2
Total = (100%)	40			24

Catatan Penilaian Reviewer:
 Artikel termasuk Scopus, SJR, 3/4, Antileel ini termasuk pada journal pada Clarivate analytic. IF: 5.6 (Q1) hal ini menunjukkan bahwa antileel pada journal yang bereputasi Internasional

Makassar, 30 Oktober 2019

Reviewer 2

Tanda tangan



Prof. Ir. Makmur Saimi, MT, Ph.D

NIDN : 0023066106

Unit Kerja : Politeknik Negeri Ujung Pandang

Jabatan Terakhir : Guru Besar

Bidang Ilmu : Teknik Elektro

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Hasil Penilaian *Peer Review* :

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d. Kelengkapan unsur dan kualitas penerbit (30%)	12			7.2
Total = (100%)	40			24

Catatan Penilaian Reviewer: *Jurnal ini tergolong jurnal bereputasi Q1 dan IEEE dgn IF: 5.6 dan artikelnya kedalaman tinggi*

Makassar, Oktober 2019
 Reviewer 1
 Tanda tangan



Prof. Dr. Ir. Nadjamuddin Harun, MS
 NIDN : 0018074501
 Unit Kerja : Fakultas Teknik UMI
 Jabatan Terakhir : Guru Besar
 Bidang Ilmu : Teknik Elektro

Sent from my iPhone

Begin forwarded message:

From: antonio.conejo@uclm.es

Date: June 17, 2013, 4:57:15 AM GMT+08:00

To: yusrih@fke.utm.my

Cc: antonio.conejo@uclm.es, antonio.conejo@uclm.es

Subject: Paper TPWRS-00367-2013.R2 by Dr. Mohammad Hassan, IMPROVING THE MW-MILE METHOD USING POWER FACTOR BASED APPROACH FOR DEREGULATED POWER SYSTEM

After careful review we have determined that your paper might be of interest for publication in the IEEE Transactions on Power Systems, after revisions, if those revisions fully and properly address the concerns of the reviewers. The comments from the reviewers appearing below may include specific revisions that are mandatory and other changes suggested. You may have to make broader changes if necessary based on general comments provided by the reviewers.

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Thanks,

Prof. Antonio Conejo, Editor in Chief
Transactions on Power Systems

COMMENTS TO THE AUTHORS:

Editor's Comments:

Editor

Comments to the Author:

Thank you for addressing some of the concerns raised in the preliminary review. The Editor still believes

the paper needs a diligent proof reading to improve the paper. The paper is still difficult to read and follow. In the revised version please submit only the revised version, instead of the original and modified version; this will eliminate confusion of what version needs to be reviewed.

From: antonio.conejo@uclm.es

Date: March 27, 2013, 2:56:26 PM GMT+08:00

To: yusrih@fke.utm.my

Cc: antonio.conejo@uclm.es, antonio.conejo@uclm.es

Subject: Paper TPWRS-00367-2013 by Dr. Mohammad Hassan, IMPROVING THE MW-MILE METHOD USING POWER FACTOR BASED APPROACH FOR DEREGULATED POWER SYSTEM

Dear Author,

The page limit for an IEEE TPWRS paper is 8 pages. Please read the Authors' Kit carefully. If you suitably modify your paper to fit the stated limit I would be happy to assign an editor who would coordinate the review of your paper.

Do not include figures/tables or explanations at the end of the manuscript.

Include supporting material in a letter to the Editor.

Upload just the 8-page manuscript.

Prof. Antonio Conejo, Editor in Chief,
Transactions on Power Systems

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From: <antonio.conejo@uclm.es>

Date: Tue, Aug 27, 2013 at 5:17 PM

Subject: Paper TPWRS-00367-2013.R3 by Dr. Mohammad Hassan, IMPROVING THE MW-MILE METHOD USING POWER FACTOR BASED APPROACH FOR DEREGULATED POWER SYSTEM

To: yusrih@fke.utm.my

Cc: antonio.conejo@uclm.es

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Thanks,

Prof. Antonio Conejo, Editor in Chief
Transactions on Power Systems

COMMENTS TO THE AUTHORS:

Editor's Comments:

Editor

Comments to the Author:

There are multiple versions of the paper in the uploaded file; only the most updated versions should be submitted for review; please reload your paper.

Please read the reviewer comments carefully before further responses

----- Forwarded message -----

From: <antonio.conejo@uclm.es>

Date: Sat, Nov 2, 2013 at 11:04 PM

Subject: Paper TPWRS-00367-2013.R4 by Dr. Mohammad Hassan, IMPROVING THE MW-MILE METHOD USING POWER FACTOR BASED APPROACH FOR DEREGULATED POWER SYSTEM

To: yusrih@fke.utm.my

Cc: antonio.conejo@uclm.es

After careful review we have determined that your paper might be of interest for publication in the IEEE Transactions on Power Systems, after revisions, if those revisions fully and properly address the concerns of the reviewers. The comments from the reviewers appearing below may include specific revisions that are mandatory and other changes suggested. You may have to make broader changes if necessary based on general comments provided by the reviewers.

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It is, rather, a recognition by our reviewers and editors that your paper merits some interest. The reviewers of the original draft will be approached to assess the revised manuscript; at the discretion of the editor, additional reviewers may be included.

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Thanks,

Prof. Antonio Conejo, Editor in Chief

COMMENTS TO THE AUTHORS:

Editor's Comments:

Editor

Comments to the Author:

The paper needs to be revised along the reviewers concerns. In particular, the authors need to address the concerns about the practicality of the approach, the consideration of reactive power and losses, and the clear formulation for a meshed network.

Reviewers' Comments:

Reviewer: 1

Comments to the Author

It is good to mention that I have not seen the previous revisions made to this manuscript. The authors have proposed a method, which includes load power factor in pricing the transmission services. The formula are derived in a clear manner. The results have been compared with MW method; however, it would be better to compare them to one of the currently available MW and MVAR tracing methods that separate MW and MVAR as well. The following questions are raised that need to be addressed:

- 1- The currently available MW and MVAR tracing methods in the literature can be used to allocate charges to transmission users. To utilities, load power factor and penalties for not following defined bands (e.g. pf within ± 0.9) that the authors have mentioned is to force customers to follow some technical standards since this can cause voltage security problems. I don't think that this should be the basis for charging network users if we are thinking of being fair and equitable to all network users. If we are charging a customer for 1 MW network usage, we should do the same for 1 MVAR (even if its pf is very close to unity) since MVAR is being provided from the network as well and is utilizing network capacity.
- 2- As an example, utilities use different energy rates such as 10 cents/kWh for [0:a1 kWh] and 30 cents/kWh for [a1 kWh:a2 kWh] and so on. Now, my question is: if you think that power factor bands should be used in allocating transmission costs and defining reference pf, why don't you use the same analogy and define a "safe or allowed" band for PLoad? Notice that high PLoad can also cause voltage security problem.
- 3- The formulas (23) and (24) are derived for a radial load. Are these formula valid when we have more than one line feeding the load? How is delta P determined in this case?

Reviewer: 2

Comments to the Author

This paper presents a power factor based approach for improving the MW-Mile method in pricing transmission services. The reviewer has the following comments:

- 1) The authors want overall to include a penalty charge in transmission use of systems charges, regarding deviations to a referenced and contracted load power factor. This attempt needs further research since the original MW-Mile method is based on average line usage and approximate calculated contributions (through GLDF or GGDF in this paper) while in the proposed method these attributes are not taken into account, in particular when adding the constant power factor coefficient penalty charge into final equation (36). Moreover, the impact each load's power factor has on each line's (active) power flow needs to be further clarified if the power factor coefficient is to be correlated to transmission losses. Especially when taking into account the fact that the MW-Mile method, as mentioned in the case study section of the paper, does not consider transmission losses into charges calculation.
- 2) The term "deregulated power system" in paper's title is not properly justified or supported in the paper.
- 3) In Section II there is no exact problem description but only a small description of MW-Mile method and

a very detailed definition of power factor. The reviewer believes that this section should be significantly altered, leaving out some unnecessary figures and equations.

4) Explanation of symbols in equation (1) has several grammar errors to be addressed.

5) In the case study section, the authors should mention the transactions (if any) that take place in the test system and describe in a more clear way the benefits of their proposed method over other embedded cost pricing methods.

----- Forwarded message -----

From: <r.scholnick@ieee.org>

Date: Mon, Dec 2, 2013 at 5:20 PM

Subject: IEEE Transactions on Power Systems - Manuscript ID TPWRS-00367-2013.R5

To: yusrih@fke.utm.my

02-Dec-2013

Dear Dr. Hassan:

Your manuscript entitled "IMPROVING THE MW-MILE METHOD USING POWER FACTOR BASED APPROACH FOR PRICING THE TRANSMISSION SERVICES" has been successfully submitted online and is presently being given full consideration for publication in the IEEE Transactions on Power Systems.

Your manuscript ID is TPWRS-00367-2013.R5.

Please mention the above manuscript ID in all future correspondence or when calling the office for questions. If there are any changes in your street address or e-mail address, please log in to Manuscript Central at <http://mc.manuscriptcentral.com/tpwrs-pes> and edit your user information as appropriate.

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Thank you for submitting your manuscript to the IEEE Transactions on Power Systems.

Sincerely,
IEEE Transactions on Power Systems Editorial Office