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Please submit your paper as per the instructions below to the Journal’s Editor-in-Chief Dr. Rob Stephen at rob.stephen@cigre.org.

Instructions to authors¹

Title Page; this contains:

Paper title

Names and affiliations of all authors; mark by an asterisk * the corresponding author and indicate at the bottom of the title page his or her email address.

Abstract: Basic guidelines for the preparation of a technical paper to be submitted to the CIGRE Engineering Letters Journal are presented here. This document is the template file that shows the format of such papers as they are to be prepared and submitted to the CIGRE Central Office. The abstract is limited to 150 words and cannot contain equations, figures, tables, or references. It should be a concise statement of the contents of the paper, namely the work that has been done, the methods used, the main results and findings, and the significance of the findings.

Index Terms: The author(s) shall provide up to 5 keywords (in alphabetical order) to help identify the major topics of the paper.

Nomenclature: A nomenclature list, if needed, should precede the Introduction.

1. Introduction

This document contains information regarding format, type sizes, and typefaces for “CIGRE Science & Engineering”. Style rules are provided that explain how to handle equations, units, figures, tables, abbreviations, and acronyms.

2. Paper Preparation

Please use automatic hyphenation and check your spelling. Additionally, be sure your sentences are complete and that there is continuity within your paragraphs. Check the numbering of your graphics (figures and tables) and make sure that all appropriate references are included.

2.1. Basics

The paper is A4 size and should be prepared with Microsoft Word with no styles. Please use your own regular typeface and size without any specific formatting; this will be by the Journal editing and layout team.

2.1.1. Section Headings

A primary section heading is enumerated by an Arabic numeral followed by a full stop.

A secondary section heading is enumerated by an Arabic numeral followed by a full stop and an additional numeral and full stop.

A tertiary section heading is enumerated by an Arabic numeral followed by a full stop and additional numerals and full stops.

A quaternary section heading is enumerated by Arabic numerals and full stops.

A subsection heading is rarely necessary, but is perfectly acceptable if required. There is no numbering in the subsection.

2.1.2. Figures and Tables

Figures should be of high quality and clearly readable. Figure axis labels are often a source of confusion. Try to use words rather than symbols. As an example, write the quantity “Magnetization,” or “Magnetization, M,” not just “M.” Put units in brackets. Do not label axes only with units, i.e. write “Magnetization [kA/m]”, not just “kA/m.” Do not label axes with a ratio of quantities and units. For example, write “Temperature [K],” not “Temperature/K.” Figure labels should be legible, approximately 8- to 10-point type.

Large figures and tables may span both columns, but may not extend into the page margins. Figure captions should be below the figures; table captions should be above the tables. Do not put captions in “text boxes” linked to the figures. Do not put borders around your figures.

All figures and tables should be submitted at the end of the manuscript. In the paper indicate as shown below where you would preferably like the figure or table to be placed. In addition, please provide pictures, if any, separately and in high resolution (min 300 dpi) in tif or jpg format.

PLACE TABLE I HERE

PLACE FIGURE 1 HERE

Numbering of references in the text

Number reference citations consecutively in square brackets [1]. The sentence punctuation follows the brackets [2]. Multiple references [2], [3] are each numbered with separate brackets [1]-[3]. Refer simply to the reference number, as in [3]. Do not use “Ref. [3]” or “reference [3]” except at the beginning of a sentence: “Reference [3] shows....”

Check that all figures and tables are numbered correctly. Use arabic numerals for figures and Roman numerals for tables.

Appendix figures and tables should be numbered consecutively with the figures and tables appearing in the rest of the paper. They should not have their own numbering system.

Units

CIGRE publications should be in metric units. In particular, the use of the International System of Units (Système Internationale d’Unités or SI Units) is advocated. This system includes a subsystem of units based on the meter, kilogram, second, and ampere (MKSA). British units may be used as secondary units (in parentheses).

Abbreviations and Acronyms

Define less common abbreviations and acronyms the first time they are used in the text, even after they have been defined in the abstract. Abbreviations such as CIGRE, SI, MKS, ac, dc, and rms do not have to be defined. Do not use abbreviations in the title unless they are unavoidable.

Math and Equations

Use either the Microsoft Equation Editor or the MathType commercial add-on for MS Word for all math objects in your paper (Insert | Equation or MathType Equation). “Float over text” should not be selected.

To make your equations more compact, you may use the solidus (/), the exp function, or appropriate exponents. Italicize Roman symbols for quantities and variables, but not Greek symbols. Use a long dash rather than a hyphen for a minus sign. Use parentheses to avoid ambiguities in denominators.

Number equations consecutively with equation numbers in parentheses flush with the right margin, as in (1). Be sure that the symbols in your equation have been defined before the equation appears or immediately following.

$$I_F = I_B = -I_C = A^2 I_{A1} + AI_{A2} + I_{A0} = \frac{-J\sqrt{3}E_A}{Z_1 + Z_2} \quad (1)$$

where I_F is the fault current.

Use “(1),” not “Eq. (1)” or “equation (1),” except at the beginning of a sentence: “Equation (1) is”

3. Appendix

Appendices, if needed, appear before the acknowledgment.

4. Acknowledgment

In this section, if needed, any pertinent acknowledgements can be made. The section should be brief and no more than a paragraph or two.

5. References

References are important to the reader; therefore, each citation must be complete and correct. There is no editorial check on references; therefore, an incomplete or wrong reference will be published unless caught by a reviewer or discussor and will detract from the authority and value of the paper. References should be readily available publications.

List only one reference per reference number. If a reference is available from two sources, each should be listed as a separate reference. Give all authors' names; do not use et al.

Samples of the correct formats for various types of references are given below.

Periodicals:

- [1] J. F. Fuller, E. F. Fuchs, and K. J. Roesler, “Influence of harmonics on power distribution system protection,” IEEE Trans. Power Delivery, vol. 3, pp. 549-557, Apr. 1988.
- [2] E. H. Miller, “A note on reflector arrays,” IEEE Trans. Antennas Propagat., to be published.
- [3] R. J. Vidmar. (1992, Aug.). On the use of atmospheric plasmas as electromagnetic reflectors. IEEE Trans. Plasma Sci. [Online]. 21(3), pp. 876-880. Available: <http://www.halcyon.com/pub/journals/21ps03-vidmar>

Books:

- [4] E. Clarke, Circuit Analysis of AC Power Systems, vol. I. New York: Wiley, 1950, p. 81.

[5] G. O. Young, "Synthetic structure of industrial plastics," in *Plastics*, 2nd ed., vol. 3, J. Peters, Ed. New York: McGraw-Hill, 1964, pp. 15-64.

[6] J. Jones. (1991, May 10). *Networks*. (2nd ed.) [Online]. Available: <http://www.atm.com>

Technical Reports:

[7] E. E. Reber, R. L. Mitchell, and C. J. Carter, "Oxygen absorption in the Earth's atmosphere," Aerospace Corp., Los Angeles, CA, Tech. Rep. TR-0200 (4230-46)-3, Nov. 1968.

[8] S. L. Talleen. (1996, Apr.). *The Intranet Architecture: Managing information in the new paradigm*. Amdahl Corp., Sunnyvale, CA. [Online]. Available: <http://www.amdahl.com/doc/products/bsg/intra/intra/html>

Papers Presented at Conferences (Unpublished):

[9] D. Ebehard and E. Voges, "Digital single sideband detection for interferometric sensors," presented at the 2nd Int. Conf. Optical Fiber Sensors, Stuttgart, Germany, 1984.

[10] Process Corp., Framingham, MA. *Intranets: Internet technologies deployed behind the firewall for corporate productivity*. Presented at INET96 Annu. Meeting. [Online]. Available: <http://home.process.com/Intranets/wp2.htm>

Papers from Conference Proceedings (Published):

[11] J. L. Alqueres and J. C. Praca, "The Brazilian power system and the challenge of the Amazon transmission," in *Proc. 1991 IEEE Power Engineering Society Transmission and Distribution Conf.*, pp. 315-320.

Dissertations:

[12] S. Hwang, "Frequency domain system identification of helicopter rotor dynamics incorporating models with time periodic coefficients," Ph.D. dissertation, Dept. Aerosp. Eng., Univ. Maryland, College Park, 1997.

Standards:

[13] IEEE Guide for Application of Power Apparatus Bushings, IEEE Standard C57.19.100-1995, Aug. 1995.

Patents:

[14] G. Brandli and M. Dick, "Alternating current fed power supply," U.S. Patent 4 084 217, Nov. 4, 1978.

6. Biographies

A technical biography (up to 100 words) for each author can be included. It should begin with the author's name. The following is an example of the text of a technical biography:

Nikola Tesla was born in Smiljan in the Austro-Hungarian Empire, graduated from the Austrian Polytechnic School, Graz, and studied at the University of Prague. His employment experience included the American Telephone Company, Budapest, the Edison Machine Works, Westinghouse Electric Company, and Nikola Tesla Laboratories. His special fields of interest included high frequency. In 1956, the term "tesla" (T) was adopted as the unit of magnetic flux density in the MKSA system. In 1975, the Power Engineering Society established the Nikola Tesla Award in his honor.

¹The above instructions are largely based (and herewith thankfully acknowledged) on the instructions included in the IEEE PES author's kit.