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PREPARATION OF INPUT DATA FOR THE AUTOMATIC CORRECTION OF ERRORS OF THE CURRENT MEASURING CHANNELS OF ELECTRICAL POWER OBJECTS CONTROL SYSTEMS

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Authors

E.M. Tankevich, I.V. Yakovlieva, G.M. Varskyi, V.I. Pankiv Institute of Electrodynamics National Academy of Science of Ukraine, pr. Peremohy, 56, Kyiv-57, 03680, Ukraine, e-mail: ivya@ied.org.ua

Abstract

The algorithm for calculating the corrections to the measurement module and phase of the currents depending on the values of these currents and how to obtain information about the errors of the current transformers is developed. On the basis of this algorithm, the program of preparation of input data for the correction of errors of the current measuring channels is developed. Its application allows minimizing the number of operations performed directly in the measuring tool while ensuring the necessary increasing of the accuracy of the measuring channel. References 4, figures 2.

Key words: measuring channel of current, current transformer, correction of measuring errors.

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References

1. Varskyi G.M., Sopel M.F., Tankevich E.M., Yakovlieva I.V. Correction of errors of the measuring channels of current in the monitoring tools of power system normal mode. *Tekhnichn a Elektrodynamika*

. 2014. No 5. P. 71–73. (Rus)

2. Current transformers. Program and procedure of state metrological certification. MDU 001/08-2000. Kyiv: Ukrmetrteststandart, 2000. (Rus)

3. Cirio D., Lucarella D., Giannuzzi G., Tuosto F. Wide area monitoring in the Italian power system: architecture, functions and experiences.

European Transactions on Electrical Power

. 2011. Vol. 21. P. 1541–1556. DOI:

https://doi.org/10.1002/etep.540

4. Zhenyu H., Kasztenny B., Madani V. Performance Evaluation of Phasor Measurement Systems. Power and Energy Society General Meeting. Conversion and Delivery of Electrical Energy in the 21st Cent., IEEE, July 2008. Pp. 1-7. DOI: <u>https://doi.org/10.1109/PES.2008.4596880</u> <u>PDF</u>