Assessment of the Hydrogenerators State

Based on Their History of Life Analysis

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Abstract

In the paper a method is proposed aiming to assess the technical state of a hydrogenerator in a given moment of time

The assessment is made based on the analysis of the hydrogenerator life history in a determined period of time; the analysis is based on a well organised informatised database comprising the events in the life history of the hydrogenerator.

A points rating method is settled for the gravity of the defects and for the extent of the maintenance works, for the results of tests and for operating and design characteristics. The system of rating is unique, in the base of 5, with a score of 1 point for normal situations, 5 points for situations of maximum gravity and 2, 3 or 4 points for intermediate situations.

The decisional criteria for assessment of the technical state depending on the total value of the conferred scores comprise 6 levels of state: new, very good, good, satisfactory, unstisfactory and severe. Finally, some considerations concerning the awareness of the risk are presented.

The paper is a part of an ample project, the final aim being the creation of the premises for introduceing the insurance system of the energetic equipments in Romania. In the future stages of the project the risk for the appearance of the defects, the extent of the consequencies and risk financing by means of insurance will be established.