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Evaluation of Automatic Generation Control (AGC) regulators by performance indices using data from real operation

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Abstract— Indices to evaluate AGC performance under both simulation and real operation are presented. These indices are based on functional dependence and statistical analysis avoiding large and long periods of data collection necessary for comparison of different regulators in real operation. A method to perform the global evaluation of the regulator using the individual values obtained for the indices is also presented. Variables typically measured in power systems are used to compute the indices. Examples of calculated values of the indices using data from real operation of two regulators in the same area of the Spanish power system are presented. Response criterion imposed in the Spanish power system is used.

Index Terms— No disponible/Not available

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