**عنوان مقاله:**

Automatic generation control of interconnected power system using RBF neural network technique

**محل انتشار:**

ششمین کنفرانس سراسری سیستم های هوشمند (سال: 1383)

تعداد صفحات اصل مقاله: 6

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**خلاصه مقاله:**

This paper presents a nonlinear Radial Basis Function Neural Networks (RBFNN) controller to Automatic Generation Control (AGC) of the power systems. In order to take large parametric uncertainties and system modeling errors into account, for training of the RBFNN controller the μ-based robust controller is being used. The proposed controller is simple and can ensure the stability of overall system for admissible uncertainties. Toillustrate effectiveness of the proposed method a two-area power system is considered as a test system. In addition, dynamical performance of the proposed controller is compared with the conventional PI and μ-based robust controllers. The resulting controllers are shown to minimize the effect of load disturbances and maintain the robust performance in the presence of plant parameter changes and system nonlinearities.

**کلمات کلیدی:**

AGC, Power System Control, Robust Control, RBF Neural Network

**لینک ثابت مقاله در پایگاه سیویلیکا:**

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