عنوان مقاله:

A Proposed Approach for Modeling of Power System Uncertanties to Design Robust PSS

محل انتشار:

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نویسندگان:

M.B Abolhasani Jabali - *Department of Electrical Engineering, Shahed University*

M.H Kazemi - *Department of Electrical Engineering, Shahed University*

Saeid Joudaki

خلاصه مقاله:

This There are so many parameters which are effective on calculations of a power system especially for controller design and variations of their values (uncertainties)can influence the performance of the controllers such as the power system stabilizers (PSS). To overcome these problems,H∞ control has been applied to design of robust PSS. One of thedifficulties is selection of the weighting function (for uncertainty model) which has a very effective role in H∞ control design. Inthis paper, an effective approach is presented to determine the weighting function; this approach is based upon transferfunctions obtained through various operation scenarios of power systems. To show the efficiency of the proposed approach, theuncertainty model is utilized to design a robust H∞ PSS by using the feedback control configuration. The simulation results of various operation scenarios show that the obtained H∞ PSS using this approach is robust enough to damp the power system oscillations

کلمات کلیدی:

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