عنوان مقاله:

Neural Network Based Models for the Control of Hydro Cascade System

محل انتشار:

تعداد صفحات اصل مقاله: 9

نویسنده:

Stokelj - *Faculty of Electrical Enginering University of Ljubljana Ljubljana Slovenia*

خلاصه مقاله:

In the paper, the issue of hydro cascade system scheduling is addressed. A number of techniques for hydro power plants modelling are discussed and a detailed comparison of various models is given. First, a detailed simulation model of a generic hydro power plant is presented. Although computationally very demanding, it produces perfectly accurate results therefore it can be used as a reference To describe the operation of a hydro power plant, relation between the power generation and water discharge has to be known. Traditional approach to finding this relation is to utilise polynomial function. To obtain better performance, new models based on neural networks are developed Finally, individual hydro power plant models are connected together to represent the operation of the whole cascade system. The developed models are tested for a hydro cascade system on the Soca river and some results are given.

کلمات کلیدی:

Artificial Neural Networks, Hydro Cascaded Systems, Modelling, Improved Efficiency

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/36321