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عنوان مقاله:

Prediction of Hydropower Generation Based on the Rainfall Value by Using the Monte Carlo Method for energy management

محل انتشار:

همایش منطقه ای مهندسی مکانیک خودرو (سال: 1390)

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نویسندگان:

Abazar Vahdat Azad - *Department of mechanical Engineering, Faculty of Engineering, Islamic Azad University, Tehran South branch*

Nader Vahdat Azad - *Department of mechanical Engineering Faculty of Mechanical Engineering, K.N. Toosi University of Technology*

Ali Behbahania - *۳, Department of mechanical Engineering Faculty of Mechanical Engineering, K.N. Toosi University of Technology*

خلاصه مقاله:

Rainfall in the catchment and river of hydropower plants is considered as the most important factor for evaluation and modeling of hydropower generation of plants. In this paper, modeling of Amir Kabir plant's hydropower generation has been done according to annual rainfall in its catchment. Then rainfall in catchment of the Amir Kabir hydropower plant is modeled using Monte Carlo method, and employed for forecasting rainfall in the coming years. Assessment of power generation of hydroelectric plants is important help in planning and management of the electric generating systems. Overall model that is obtained in this study have important applications. Managers can use it to know ability to produce hydropower in short-term of the coming years. In the long term potential impact of probable climate change in the corresponding catchment and hydropower generation can be estimated

کلمات کلیدی:

Energy management- Hydropower Plants- Hydroelectric Power Generation- Relationship of Precipitation and Hydro Electrical Energy- Monte Carlo Modeling, climate change and energy production

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