SOLVING THE HYDROTHERMAL COORDINATION PROBLEM USING AN ARTIFICIAL IMMUNE SYSTEM METHOD

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ABSTRACT

Biological system such as Artificial Immune System (AIS) regarded as sophisticated information processing systems and expected to provide inspiration for various ideas to science and engineering. This report presents a short-term hydrothermal coordination (SHC) scheduling solution using the AIS method. The main idea is to minimize cost generation while maintaining the system within its constraints limit. The developed Artificial Immune System optimization technique used the total generation cost as the objective function and represented as affinity measure. Through genetic evolution, the antibodies with high affinity measure were produce and become the solution. The proposed method has been test on three generations units system and the results given converge.

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