

Turbine speed control system based on a fuzzy-PID (PDF)

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Title: Turbine speed control system based on a fuzzy-PID

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摘要: The flexibility demand of marine nuclear power plant is very high, the multiple parameters of the marine nuclear power plant with the once-through steam generator are strongly coupled, and the normal PID control of the turbine speed can't meet the control demand. This paper introduces a turbine speed Fuzzy-PID controller to coordinately control the steam pressure and thus realize the demand for quick tracking and steady state control over the turbine speed by using the Fuzzy control's quick dynamic response and PID control's steady state performance. The simulation shows the improvement of the response time and steady state performance of the control system.

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