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Fuzzy Controller using Circulating mode for ITER Poloidal Field (PF) AC/DC Converter System

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This paper presents new technique using fuzzy logic controller to improve the performance of the ITER poloidal field (PF) converter systems. A fuzzy controller is considered for ITER PF converter system, using the conventional PI controller and Fuzzy controller (FC). The dynamic behavior and transient response of the PF converter system in circulating mode is proposed under normal operation by analysis and simulation. The analysis results determine that the fuzzy logic control can achieve better operation performance.

Eligible for student paper award?

Yes

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