Review of: "The Application of Adjustable Magnetic Devices in Electric Power Systems"

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Potential competing interests: No potential competing interests to declare.

The article presented the principles of operation and test results for models of electrical systems including a variable inductance device. Thus, the operation of the device was based on the interaction between a pair of coupled fluxes, but without relying on the natural non-linearity of the ferromagnetic circuit. Instead, the interaction between two magnetic fluxes in the near-linear range of operation of the ferromagnetic core was explored. The experimental results show the possibility of obtaining the desired reactance value smoothly by controlling the flow in the inductor, with a relative error not exceeding 15%. Furthermore, tests of a tunable resonant circuit show the usefulness of this device in an electrical power system. Thus, it seems that the proposed device offers an attractive solution, mainly for electrical power systems with adaptive characteristics, such as those used to improve electricity quality and for energy transmission via transmission lines. The article is well-written and reasoned presenting new contributions. Therefore accepts the article for publication.