27th IEEE Symposium on Fusion Engineering



Contribution ID: 85 Type: Poster

Research on the Method of Reactive Power Detection for Tokamak Coil Power Supply Based on AC/DC System Active Power Balance

Tuesday 6 June 2017 13:40 (2 hours)

A new method of real-time reactive power detection is proposed, which aims to be applied in reactive power for Tokamak coil power supply volatility, high random and the contradiction between accuracy and real-time of traditional method. It based on AC/DC system active power balance principle, and considering the electric network voltage sag, distortion and excitation current of transformer. The characteristics of the detection method are high real-time and precision, which not affected by electric network time-varying parameter. The method has been proved correctness and effectiveness by the experimental of reactive power detection for poloidal field power supply in EAST.

Eligible for student paper award?

No

Authors: Mr WU, Yanan (ASIPP); Mr MAO, Huafeng; Mr LI, Jun; Mr LU, Jing; Mr FU, Peng; Mr XU,

Liuwei

Presenter: Mr WU, Yanan (ASIPP)

Session Classification: T.POS: Poster Session T

Track Classification: Power supply systems