

ABSTRACT

In order to operate an electric power system adequately, reliable data are necessary to allow effective control actions. At the Control Center, the State Estimation function produces, by systematically processing real-time data, an estimate of the most probable operating state of the system.

This work deals with the implementation of the State Estimation function in an Energy Management System. The main difficulties found in accomplishing this task are described.

A Forecasting-Aided State Estimator (FASE) was adopted owing to its benefits as compared with the static-nature one. Numeric results using simulated and real data are presented and discussed.