

Conception optimale des systèmes de production par une approche basée sur un système de colonies de fourmis artificielles

This work is devoted to the dispatching of the reactive power and the maintain of voltage profile in the electrical network power systems in steady state by a hybrid approach. Combining heuristic and numerical technique has been chosen. The considered approach deals with the security problem, mainly the elimination of voltage constraint violation disturbances. Firstly, the effect of the reactive power transmission upon the voltage drop and the active power losses has been analysed. Two important properties have been extracted; these will be used in the development of the approach