

Influence of nodes' and branches' parameters on the sensitivity of a power system's elements.

Belov E. I.

The elements (nodes and branches) of the electric power system (EPS), the change in the parameters of which has the largest influence on the sensory character of its elements, are determined by analyzing the minimum singular value of the Jacobi matrix. Experimental calculations of the modes in the RastrWin software were carried out to verify the correctness of the search results for the nodes and branches that determine the sensibility of EPS elements.

Keywords: Jacobian matrix, singular value analysis, sensitive nodes and branches, minimum singular value.