

عنوان مقاله:

Decision Tree Based Online Identification of Critical Voltage Control Area

محل انتشار:

سومین کنفرانس ملی و اولین کنفرانس بین المللی پژوهش های کاربردی در مهندسی برق، مکانیک و مکترونیک (سال: 1394)

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خلاصه مقاله:

New method of online identification of critical voltage control area (CVCA) based on decision tree is presented. Voltage instability is one of the main causes of blackouts in modern power systems. The objective of this paper is to propose an online methodology for identification of CVCA, which is key function for preventive and remedial actions against instability. This is carried out under various system operation and contingency conditions by using offline trained decision trees (DT) generated and online PMU measurements. Numerical results on the New England 39-bus test system, shows the suitability and effectiveness of the proposed method.

کلمات کلیدی:

(Voltage stability, voltage control area (VCA), decision tree (DT)

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