عنوان مقاله:

Simultaneous Sizing, Sitting, and Service Area Determination of Sub-transmission Substations and Distributed Generations Considering Load Uncertainty by GSO Algorithm

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خلاصه مقاله:

in this paper, a method is proposed for sizing, sitting and service area determination of subtransmission substations from among candidate and available substations considering distributed generations. In this way, an economic objective function along with required constraints are utilized for implementation of an economic -technical design. In addition, with regard to uncertainty in load forecasting, each of load centers is considered as a fuzzy model. Moreover, fuzzy sets are employed to model uncertainties. Due to problem complexity and several factors involved, problem optimization is completed using robust GSO algorithm. Several tests on a realistic network have been carried out to demonstrate the effectiveness of this method.

کلمات کلیدی:

subtransmission substations, distributed generations, fuzzy model, load uncertainty, GSO algorithm

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