The IEEE 39-bus system analyzed in this report is commonly known as "the 10-machine New-England Power System." This system's parameters are specified in a paper by T. Athay et al[1] and are published in a book titled 'Energy Function Analysis for Power System Stability'[2]. This case is used to study simultaneous damping of local and inter-are modes in a system wit ha highly symmetrical structure.

[1] T. Athay, R. Podmore, and S. Virmani. \A Practical Method for the Direct Analysis of Transient

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[2] M. A. Pai. Energy function analysis for power system stability. The Kluwer international series in

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