Combination of Topology and Rough Set for Analysis of Power System Control

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Abstract : In this research, we have linked the concept of rough set and topological structure to the creation of a new topological structure that assists in the analysis of the information systems of some electrical engineering issues. We used non-specific information whose boundaries do not have an empty set in the top topological structure is rough set. It is characterized by the fact that it does not contain a large number of elements and facilitates the establishment of rules. We used this structure in reducing the specifications of electrical information systems. We have provided a detailed example of this method illustrating the steps used. This method opens the door to obtaining multiple topologies, each of which uses one of the non-defined groups (rough set) in the overall information system.

Keywords : electrical engineering, information system, rough set, rough topology, topology

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