

Dynamic Topology Estimations for Resilient Distribution Network

Abstract-With growing complexity and uncertainty from distributed generations and active customers, distribution networks are facing more unexpected events and topology changes; while very limited measurements may restrict the observability of distribution system states. Meanwhile, massive data from various types of users (if they can be used), can be valuable for power utilities. This makes privacy and data security a more critical issue, while being endowed with operation and market flexibilities. Here we would discuss the issue and make some proposes for Dynamic Topology Awareness (DTA) both on solutions algorithmically and on platform structure.