

Application of MICAH to a Power Grid Problem

This Petri net diagram of an IEEE standard 37 bus delta radial distribution feeder includes additional hypothetical distributed generation information to investigate the effect of adding distributed generation to the complexity of the network. The graph includes 38 places and 75 transitions. Distributed generators added to places P75 and P24 introduced no new states but resulted in twelve new transitions for the additional paths leading away from the distributed generators. The two lines depicted in red indicate the additional distributed generation along the line. The methods used in MICAH can accommodate this enriched problem complexity while other methods cannot.

