



Certificate

This is to certify that the thesis entitled '**PARTICLE SWARM OPTIMIZATION IN DEREGULATED ELECTRICAL POWER SYSTEMS**' submitted by **Mr. Kartik S. Pandya** in fulfillment of the degree of **DOCTOR OF PHILOSOPHY** in Electrical Engineering Department, Faculty of Technology & Engineering, The M. S. University of Baroda, Vadodara is a bonafide record of investigations carried out by him in the Department of Electrical Engineering, Faculty of Technology & Engineering, M. S. University of Baroda, Vadodara under my guidance and supervision. In my opinion the standards fulfilling the requirements of the Ph.D. Degree as prescribed in the regulations of the University has been attained.

October, 2011

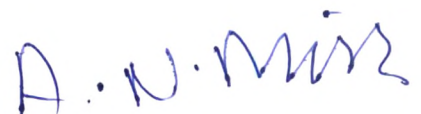

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