## LIST OF ABBREVIATONS

AGC : Automatic Generation Control

GA : Genetic Algorithm

P<sub>c</sub> : Probability of Crossover

Pm : Probability of Mutation

Popsize : Population Size

FLC : Fuzzy Logic Controller

trimf : Triangular Membership Function

PID : Proportional Integral Derivative

FIS : Fuzzy Inference System

T<sub>t</sub> : Turbine Time Constant

T<sub>g</sub> : Governor Time Constant

H : Generator Inertia Constant

R : Governor Speed Regulation

Kg : Gain of Governor

Kp : Power System Gain

DPd : Disturbance on Generator Side

 $\Delta f$  : Frequency Deviation

 $d/dt(\Delta f)$  : Derivative of Frequency Deviation

ISE : Integral Square Error

ISO : Independent system operator

Mp : Peak Overshoot

ts : Settling time

mfs : Membership function

Psize : Population Size

DPM : Disco Partition Matrix