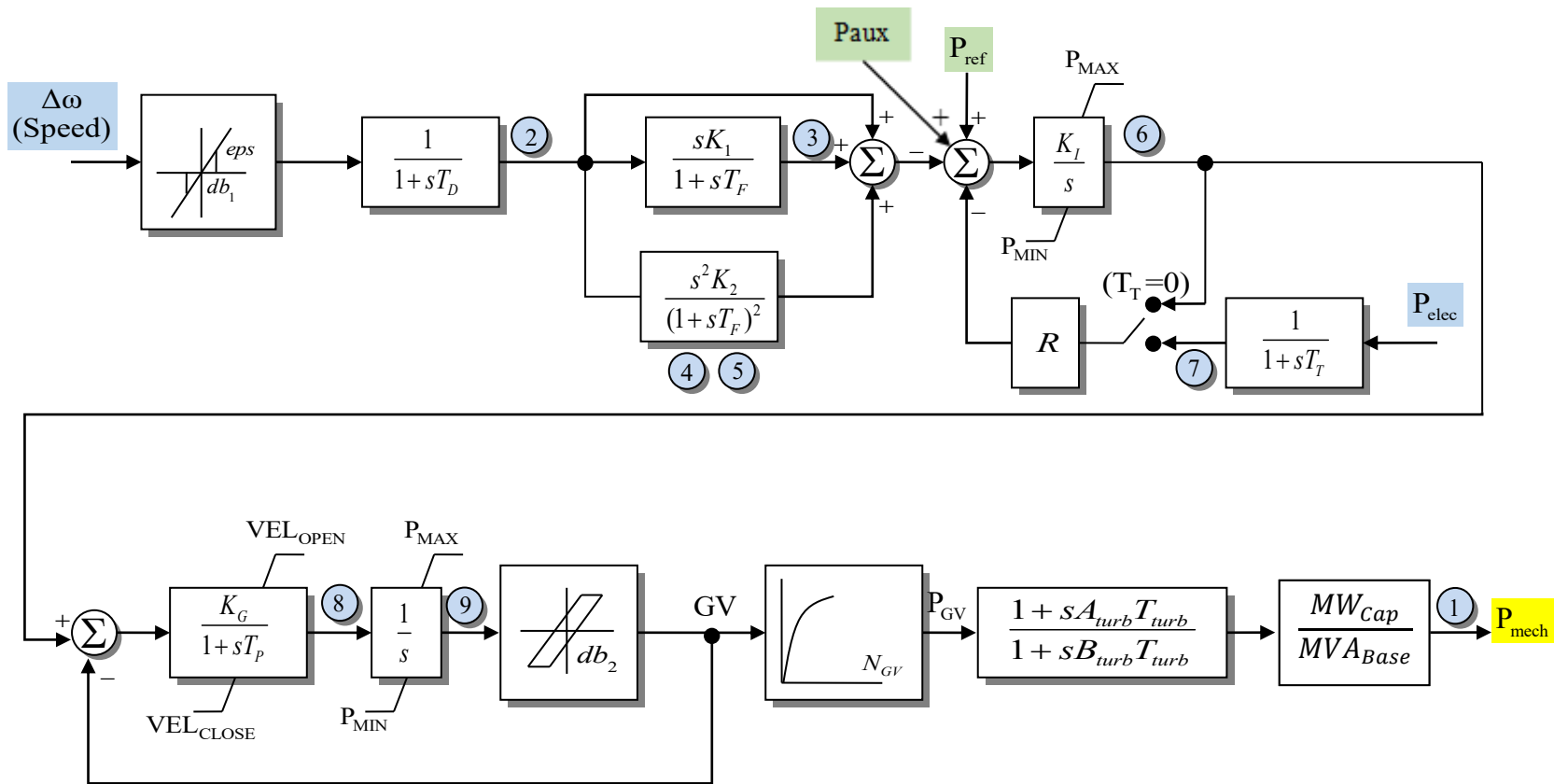


Governor G2WSCC

Governor G2WSCC
Double Derivative Hydro Governor and Turbine
Represents WECC G2 Governor Plus Turbine Model



States

- 1 - P_{mech}
- 2 - T_D
- 3 - K_1
- 4 - K_2 first
- 5 - K_2 second
- 6 - Integrator
- 7 - P_{elec} Sensed
- 8 - Valve
- 9 - Gate

Model supported by PSLF

GV1, PGV1...GV6, PGV6 are the x,y coordinates of N_{GV} block

Parameters:

MWCap	Turbine Rating, MW
Pmax	Maximum gate opening, pu of mwcap
Pmin	Minimum gate opening, pu of mwcap
R	Governor control flag
Td	Input filter time constant, sec
Tf	Washout time constant, sec
Tp	Gate servo time constant, sec
Velopen	Maximum gate opening velocity, pu/sec
Velclose	Maximum gate closing velocity, pu/sec
K1	Fraction of hp shaft power after first boiler pass
K2	Fraction of lp shaft power after first boiler pass
Ki	Integral gain, pu
Kg	Gate servo gain, pu
Tturb	Turbine time constant, sec
Aturb	Turbine numerator multiplier
Bturb	Turbine denominator multiplier
Tt	Power feedback time constant, sec
db1	Intentional deadband width, Hz
Eps	Unintentional db hysteresis, Hz
db2	Unintentional deadband, MW
Gv1	Nonlinear gain point 1, pu gv
Pgv1	Nonlinear gain point 1, pu power
Gv2	Nonlinear gain point 2, pu gv
Pgv2	Nonlinear gain point 2, pu power
Gv3	Nonlinear gain point 3, pu gv
Pgv3	Nonlinear gain point 3, pu power
Gv4	Nonlinear gain point 4, pu gv
Pgv4	Nonlinear gain point 4, pu power
Gv5	Nonlinear gain point 5, pu gv
Pgv5	Nonlinear gain point 5, pu power
Gv6	Nonlinear gain point 6, pu gv
Pgv6	Nonlinear gain point 6, pu power