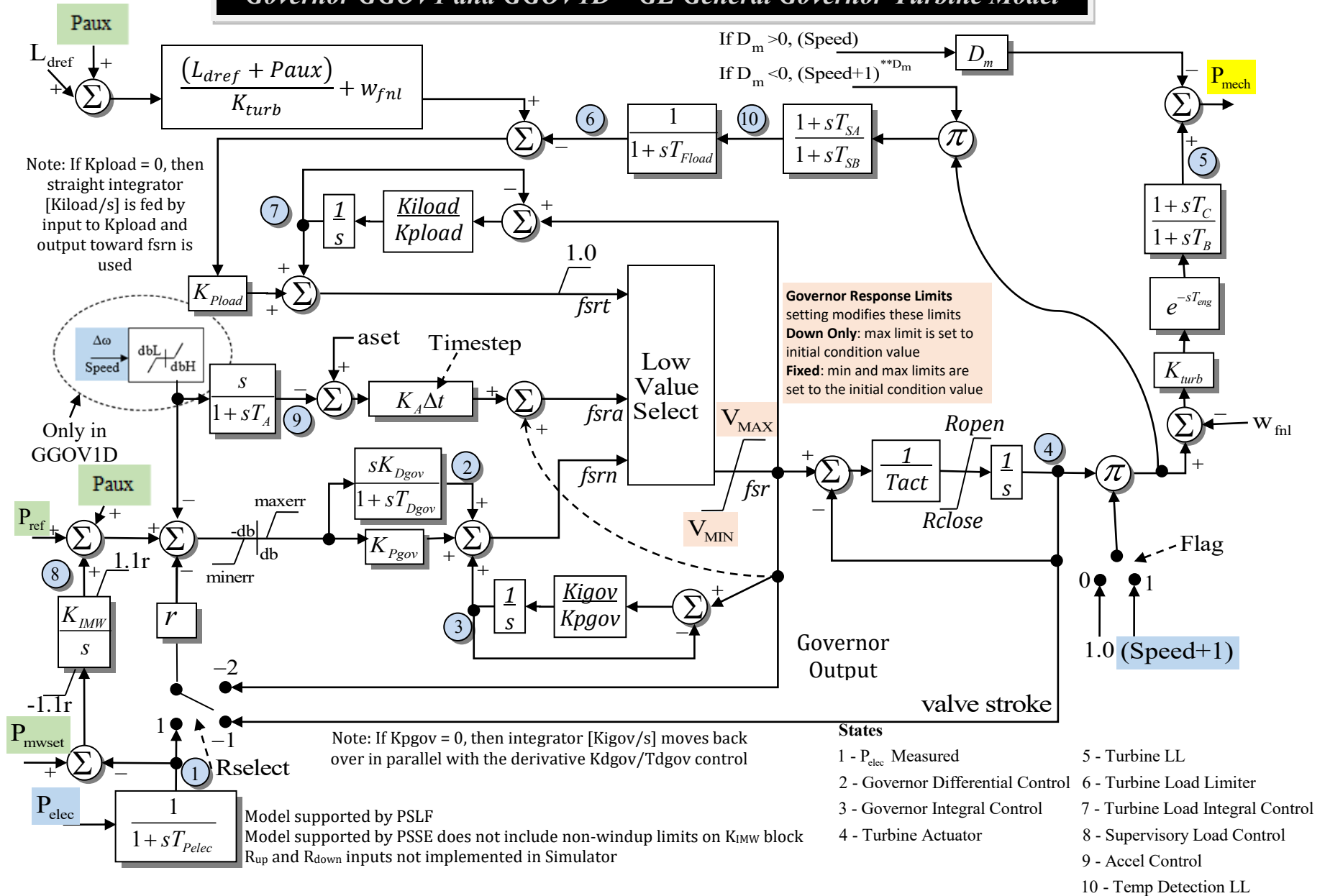


Governor GG0V1 and GG0V1D

Governor GGOV1 and GGOV1D – GE General Governor-Turbine Model



Parameters for GGOV1:

Trate	Turbine rating, MW
Rselect	Feedback signal for droop
Flag	Switch for fuel source characteristic
R	Permanent droop, pu
Tpelec	Electrical power transducer time constant, sec
Maxerr	Maximum value for speed error signal
Minerr	Minimum value for speed error signal
Kpgov	Governor proportional gain
Kigov	Governor integral gain
Kdgo	Governor derivative gain
Tdgo	Governor derivative controller time constant
Vmax	Maximum valve position limit
Vmin	Minimum valve position limit
Tact	Actuator time constant
Kturb	Turbine gain
Wfnl	No load fuel flow, pu
Tb	Turbine lag time constant
Tc	Turbine lead time constant
Teng	Transport lag time constant for diesel engine
Tfload	Load limiter time constant
Kpload	Load limiter proportional gain for PI controller
Kiload	Load limiter integral gain for PI controller
Ldref	Load limiter reference value, pu
Dm	Speed sensitivity coefficient, pu
Ropen	Largest (>0) valve opening rate, pu/sec
Rclose	Largest (<0) valve closing rate, pu/sec
Kimw	Power controller (reset) gain
Aset	Acceleration limiter setpoint, pu/sec
Ka	Acceleration limiter gain
Ta	Acceleration limiter time constant, sec
Db	Speed governor dead band, pu
Tsa	Temperature detection lead time constant, sec
Tsb	Temperature detection lag time constant, sec
Rup	Maximum rate of load limit increase
Rdown	Maximum rate of load limit decrease

Parameters for GGOV1D:

Trate	Turbine rating, MW
Rselect	Feedback signal for droop
Flag	Switch for fuel source characteristic
R	Permanent droop, pu
Tpelec	Electrical power transducer time constant, sec
Maxerr	Maximum value for speed error signal
Minerr	Minimum value for speed error signal
Kpgov	Governor proportional gain
Kigov	Governor integral gain
Kdgo	Governor derivative gain
Tdgo	Governor derivative controller time constant
Vmax	Maximum valve position limit
Vmin	Minimum valve position limit
Tact	Actuator time constant
Kturb	Turbine gain
Wfnl	No load fuel flow, pu
Tb	Turbine lag time constant
Tc	Turbine lead time constant
Teng	Transport lag time constant for diesel engine
Tfload	Load limiter time constant
Kpload	Load limiter proportional gain for PI controller
Kiload	Load limiter integral gain for PI controller
Ldref	Load limiter reference value, pu
Dm	Speed sensitivity coefficient, pu
Ropen	Largest (>0) valve opening rate, pu/sec
Rclose	Largest (<0) valve closing rate, pu/sec
Kimw	Power controller (reset) gain
Aset	Acceleration limiter setpoint, pu/sec
Ka	Acceleration limiter gain
Ta	Acceleration limiter time constant, sec
Db	Speed governor dead band, pu
Tsa	Temperature detection lead time constant, sec
Tsb	Temperature detection lag time constant, sec
Rup	Maximum rate of load limit increase
Rdown	Maximum rate of load limit decrease
DbH	Deadband High (pu)
DbL	Deadband Low (pu)