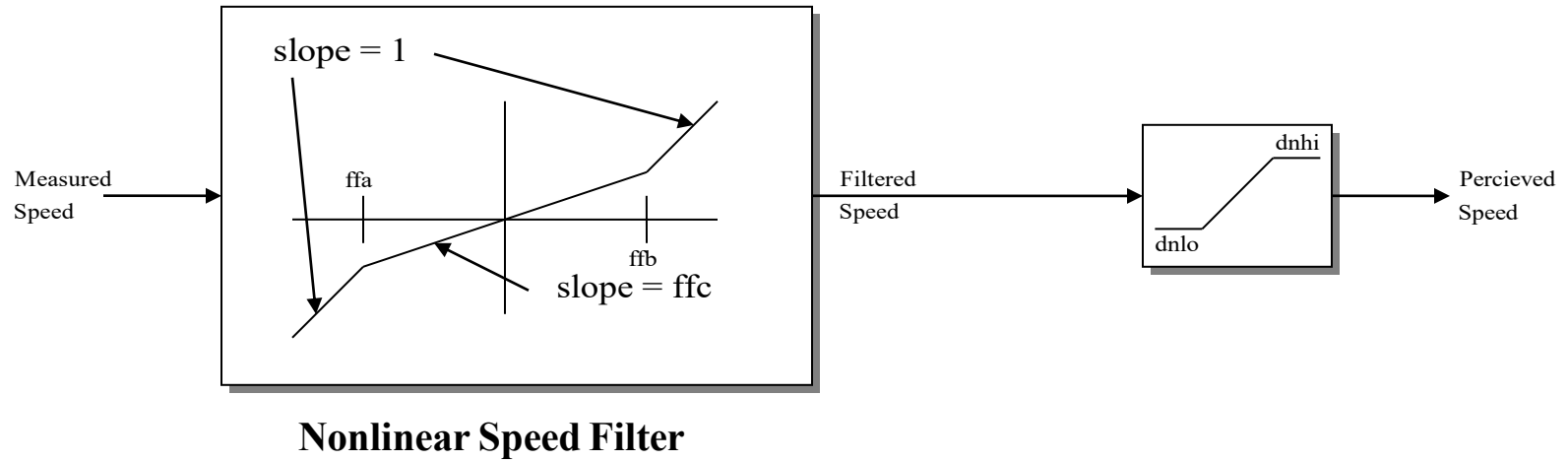


Governor GGOV3

Governor GGOV3 - GE General Governor-Turbine Model

GGOV3 is identical to GGOV1 except for the speed input into the summation block in front of the PID controller. This speed input is run through a non-linear speed filter.



Model supported by PSLF
Rate limit dnrate not used in Simulator

Parameters:

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
Kdgov	Governor derivative gain
Tdgov	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
Tbd	Model Parameters\Tbd
Tcd	Tcd, sec
ffa	Model Parameters\ffa
ffb	Model Parameters\ffb

ffc	Model Parameters\ffc
dnrate	Model Parameters\dnrate
dnhi	Model Parameters\dnhi
dnlo	Model Parameters\dnlo
t1	Perceived speed deviation input breakpoint, sec
t2	Perceived speed deviation input breakpoint, sec
t3	Perceived speed deviation input breakpoint, sec
t4	Perceived speed deviation input breakpoint, sec
t5	Perceived speed deviation input breakpoint, sec
n1	Perceived speed deviation at breakpoint time, pu
n2	Perceived speed deviation at breakpoint time, pu
n3	Perceived speed deviation at breakpoint time, pu
n4	Perceived speed deviation at breakpoint time, pu
n5	Perceived speed deviation at breakpoint time, pu

