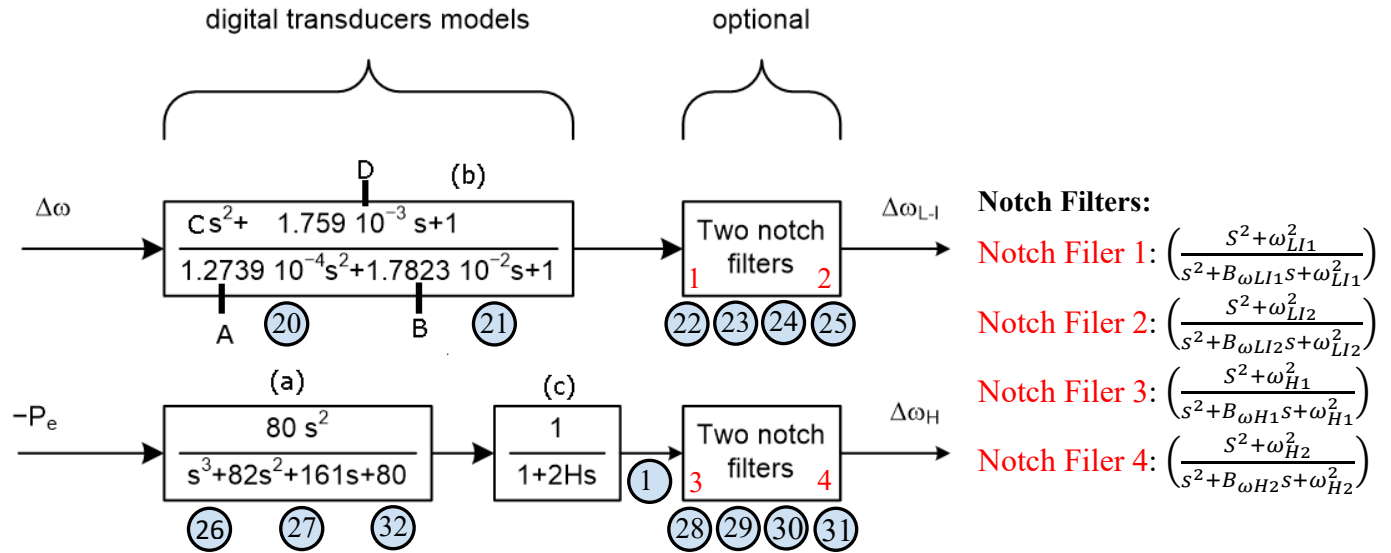


Stabilizer PSS4C

Stabilizer PSS4C IEEE Std 421.5-2016 Stabilizer with multi-band

States:

- 1 – State M
- 20 – State CDAB Internal
- 21 – State CDAB Output
- 22 – State WBL1 Internal
- 23 – State WBL1 Output
- 24 – State WBL2 Internal
- 25 – State WBL2 Output
- 26 – State AB Internal
- 27 – State AB Output
- 28 – State WBH1 Internal
- 29 – State WBH1 Output
- 30 – State WBH2 Internal
- 31 – State WBH2 Output
- 32 – State TH



footnotes:

(a) This block diagram is as follows in PSS4B: $\left(\frac{1}{sT_H + 1} \right) \left(\frac{s^2}{A_H s^2 + B_H s + 1} \right)$, but in

PSS4C it is rewritten as: $\left(\frac{1}{s+1} \right) \left(\frac{80s^2}{s^2 + 81s + 80} \right)$,

where $T_H = 1$ $A_H = 1$ $B_H = 1$ and internally in PowerWorld we added a 80 gain in the numerator, and in the denominator an 80 is added where the 1 was in PSS4B.

(b) This block diagram is as follows in PSS4B: $\left(\frac{C_{LI}s^2 + D_{LI}s + 1}{A_{LI}s^2 + B_{LI}s + 1} \right)$, where $C_{LI} = 0$.

(c) The parameter H is supposed to be the inertia of the unit in pu. If set to zero then internally in PowerWorld we get the H from the generator transient model and multiply by 2.

Stabilizer PSS4C

Stabilizer PSS4C Stabilizer with multi-band

States:

- 2 – State KL11TL1
- 3 – State TL3
- 4 – State TL5
- 5 – State KL17TL7
- 6 – State TL9
- 7 – State TL11
- 8 – State KI11TI1
- 9 – State TI3
- 10 – State TI5
- 11 – State KI17TL7
- 12 – State TI9
- 13 – State TI11
- 14 – State KH11TH1
- 15 – State TH3
- 16 – State TH5
- 17 – State KH17TH7
- 18 – State TH9
- 19 – State TH11
- 33 – State KVL11TL1
- 34 – State TVL3
- 35 – State TVL5
- 36 – State KVL17TL7
- 37 – State TVL9
- 38 – State TVL11

