The basic relation is:

Coil Stress= K1 \* Ipf5^2+ sum for i=1 to n (Ki\* Ipf5\*Ipfi).

For unit currents

Coil Stress = K1 + sum for i=1 to n (Ki\* Ipf5\*Ipfi).

For an individual ANSYS run with only PF5 unit currents,

The stress due to the self load is assigned the value, hfact = K1\*I pf5^2. Or K1 for unit currents

For an individual ANSYS run with a pairing of PF5 and for example coil b, with unit currents (Ipf5, and Ipfb, =1.0) the stress per unit coil currents is factb in the spreadsheet.

Coil Stress for unit Pf5 and Pfb currents = hfact+ Kb. Where the coil stress for unit currents is assigned the bfact value

And Kb =bfact-hfact Then the total stress for all coil currents is

Coil Stress= hfact \* Ipf5^2+ sum for i=1 to n ((ifact-hfact)\* Ipf5\*Ipfi).

In the spreadsheet this is implemented as:

=(B7\*(afact-hfact)+C7\*(bfact-hfact)+D7\*(cfact-hfact)+E7\*(dfact-hfact)+F7\*(efact-hfact)+G7\*(ffact-hfact)+H7\*(gfact-hfact)+I7\*(hfact-hfact)+J7\*ifact+K7\*(jfact-hfact)+L7\*(kfact-hfact)+M7\*(lfact-hfact)+N7\*(mfact-hfact)+O7\*(nfact-hfact)+P7\*(ofact-hfact)+Q7\*(pfact-hfact))/1000000/1000000\*I7 +hfact\*I7^2/1000000000000

Where I7 is the PF5 current in the equilibrium. Notice that in the sum, the hfact effect is zeroed out but then is added back in at the end multiplied by the square of the PF5 current.