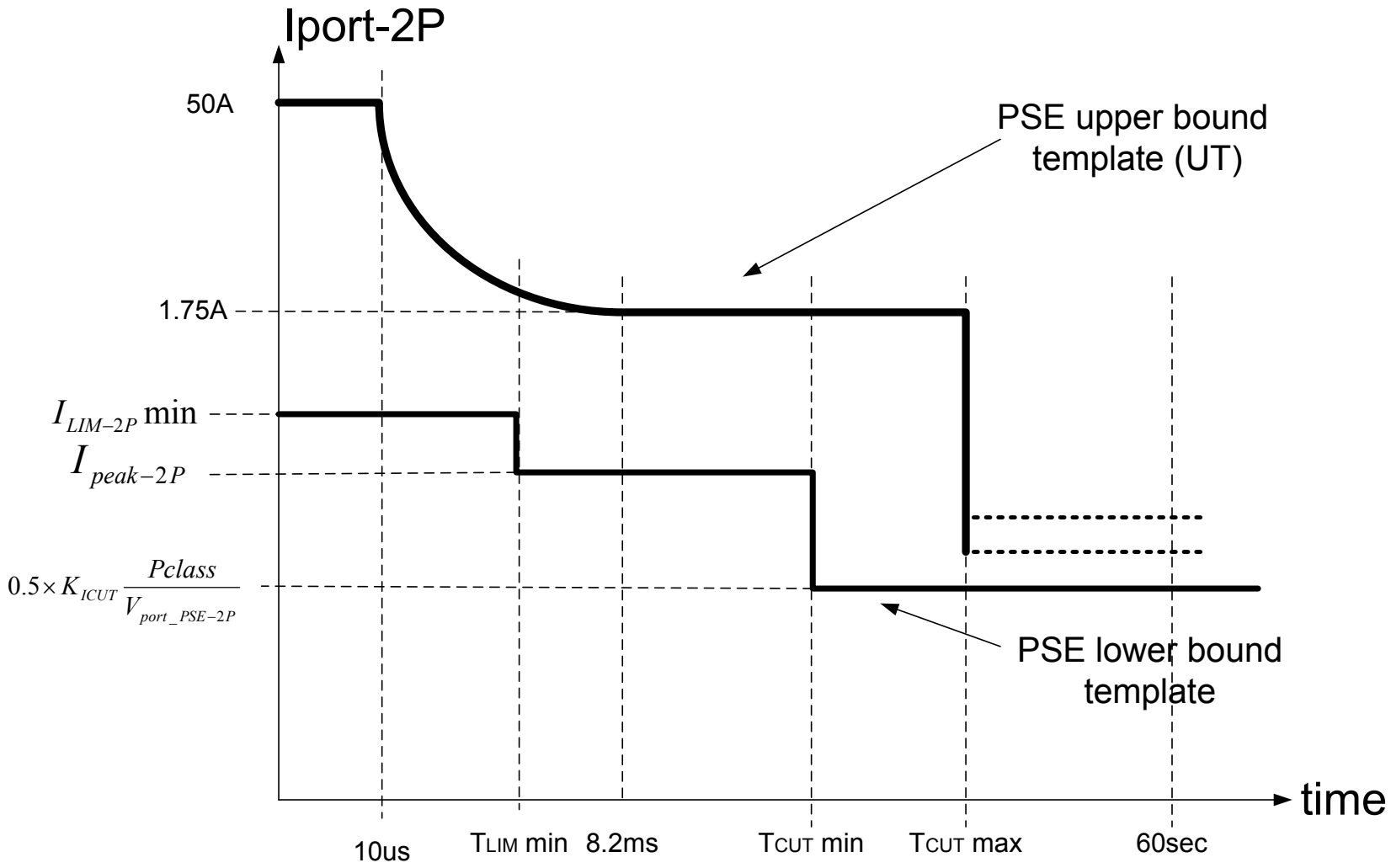
Updated Table 3-11

1. Update table 33-11 item 7 as follows:
2. Update Figure 33-14 accordingly. See attached below.
3. Add the following Editor Note below the above table.

Item	Parameter	Symbol	Unit	Min	Max	PSE Type	Additional Information
7	Overload current per pair set, detection range	I_{CUT-2P}	A	Pclass/Vport_PSE-2P	I_{LIM}	1, 2	Optional LIMIT; See 33.2.7.6, Table 33-7. K_icut3=0.556. K_icut4=0.538. If PSE is using active or passive pair to pair current balancing circuitry, Kicut3 or Kicut4 may be lower down to 0.5 per equation TBD.
				Kicut3X Pclass/Vport_PSE-2P		3	
				Kicut4 X Pclass/Vport_PSE-2P		4	

Editor Note: Icut-2P min values (K_icut3 and K_icut4) are subject to final E2EP2P_Iunb/Runb results after conducting statistical analysis (if it will be required) which will result with lower values. The current values are derived from worst case analysis model. Equation TBD will be supplied for next meeting.

See derivation of the above numbers in Annex A


Iport-2P
50A
1.75A
I_{LIM-2P} min
$I_{peak-2P}$
$0.5 \times K_{ICUT} \frac{Pclass}{V_{port\_PSE-2P}}$
PSE upper bound template (UT)
PSE lower bound template
time
10us
TLIM min 8.2ms
TCUT min
TCUT max
60sec

Annex A: Derivation of Icut-2P

1. Icut_min-2P = Icont-2P_unb by definition.
2. Worst case P2P_Iunb conditions in Type 3 is at short cable (0.1Ω) and in Type 4 is at long cable (12.5Ω) therefore the ratio

   $$Optimized\_E2EP2P\_Iunb\_effect = \frac{\text{Icont - 2P\_unb\_max}}{\text{Icont - 2P\_max}}$$ can be used to set Pclass/Vport_PSE-2P at E2EP2P_Iunb conditions, therefore:

Icut_min-2P = Icont-2P_unb= (Icont-2P_unb_max/Icont-2P_max)*0.5*Pclass/Vport_PSE-2P=
= (0.668/0.6)*0.5*Pclass/Vport_PSE-2P=1.113*0.5*Pclass/Vport_PSE-2P.
Icont-2P_unb=0.556*Pclass/Vport_PSE-2P for Type 3 PSE.
In similar way for Type 4: Icont-2P_unb= (0.931/0.865)*0.5*Pclass/Vport_PSE-2P=1.076*0.5*Pclass/Vport_PSE-2P.
Icont-2P_unb=0.538*Pclass/Vport_PSE-2P