1. Update table 33-11 item 7 as follows:

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~~Kicut=: 0.596 for class 5. ~~0.556~~0.557 for class 6. 0.539 for class 7. ~~K_icut4=0.538~~0.535 for class 8.
				~~Kicut3~~ Kicut X Pclass/Vport_PSE-2P		3,4	
				~~Kicut4 X Pclass/Vport_PSE-2P~~		~~4~~	

---------- End of Baseline Text ----------

Notes:
The value for class 6 was updated from D1.1 due to round down error.
The value for class 8 was updated from D1.1 due to the changes made for Type 4 power from 71.3W to 71W.
The values for Class 5 and 7 are new. See Annex A and B for details.

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:

Icont-2P_max=0.5*(Pclass/Vport_PSE_min)
Icont-2P_unb_max=Simulation results, the pair with maximum current from Rch=0.1 Ω to 12.5Ω

For Type 3 class 5:
Icut_min-2P = Icont-2P_unb= (Icont-2P_unb_max/Icont-2P_max)*0.5*Pclass/Vport_PSE-2P=
= (0.536/0.45))*0.5*Pclass/Vport_PSE-2P=0.596*Pclass/Vport_PSE-2P.
For Type 3 class 6:
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=~~**0.556**~~**0.557*Pclass/Vport_PSE-2P.**

For Type 4 class 7:
Icut_min-2P = Icont-2P_unb= (Icont-2P_unb_max/Icont-2P_max)*0.5*Pclass/Vport_PSE-2P=
= (0.778/0.721)*0.5*Pclass/Vport_PSE-2P=**0.539*Pclass/Vport_PSE-2P.**
For Type 4 class 8:
Icont-2P_unb= (~~0.931~~0.926/0.865)*0.5*Pclass/Vport_PSE-2P=~~**0.538**~~**0.535*Pclass/Vport_PSE-2P**
Notes:

1. All Kicut values are worst case ratio and not depend on Vport_PSE-2P. Generating Kicut as function of Vport_PSE-2P to reduce unnecessary margins in Icut_min is possible but not necessary and adds complexity.
2. As long as total system Vdiff stays 60mV and we require the same Icon-2P_unb per class to be met with extended power mode, the Kicut ratio per class will remain the same for extended power

Annex B: Why changing D1.1 from Kicut3 and Kicut4 to Kicut per class.

The reason was to fix accuracy problems that were resulted with differences between Icut_min to Icont-2P_unb that must be the same value. The differences were occurred due to the usage of a constant that was calculated for Type 3 class 6, to calculate Icut_2P min for class 5 which is incorrect. The same was for the constant that was calculated for Type 4 class 8 and was used to calculate Class 7 Icut-2P.

#	Parameter	Class 5	Class 6	Class 7	Class 8
1	Icont-2P_unb	0.536	0.668	0.778	0.926
2	K_icut3 and K_icut4	0.557	0.557	0.535	0.535
3	Icut_min per the current constants K_icut3 and K_icut4 in D1.2 [A]	0.501	0.668	0.772	0.926
4	There is an error due to using constants of Type power for all classes instead of per class [A]	-0.035	0.000	-0.006	0.000
5	Changing to constants per class	0.596	0.557	0.539	0.535
6	New Icut_min=Kicut*Pclas/Vport_min [A]	0.536	0.668	0.778	0.925

We can see now that Icut_min=Icont-2P_unb as required (lines 1 and 6).