



13-961029-CLN-01

TO: J SPITZER
FROM: C NEUMEYER
SUBJECT: REVISED AXIAL LOAD ASSUMPTIONS

References:

[1] 13-961024-CLN-01, "Axial Load Computations"

Based on comments received on the reference memo, the PF1b lower coil need not be operated with the same polarity as the PF1a lower and PF2b lower coils for plasma operations. So, this mode can be excluded from consideration in the "worst case" determination for the launching load on the OH. The following table shows the effect of excluding the PF1a lower and PF2b lower coils from the force summation.

Circuit	Max Current	Nominal Polarity	(+) OH Force @ Nominal or (+) Polarity	Original Inclusion Assumption	Max (+) OH Force @ (-) loh	Revised Inclusion Assumption	Max (+) OH Force @ (-) loh
	(kA)	(x=+/-)	(k#)		(k#)		(k#)
OH	24	x	0.0	0	0.0	0	0.0
PF1a/u	10	x	3.5	1	3.5	1	3.5
PF1a/l	10	x	-3.5	-1	3.5	0	0.0
PF1b/l	15	+	-36.4	-1	36.4	-1	36.4
PF2a/u+l	20	+	0.0	0	0.0	0	0.0
PF2b/u	20	x	12.9	1	12.9	1	12.9
PF2b/l	20	x	-12.9	-1	12.9	0	0.0
PF3a/u+l	20	-	0.0	0	0.0	0	0.0
PF3b/u	20	x	6.5	1	6.5	1	6.5
PF3b/l	20	x	-6.5	-1	6.5	-1	6.5
PF4(a+b+c)/u	20	-	0.0	0	0.0	0	0.0
+l							
lp z > 0	1000	+	1.5	0	0.0	0	0.0
lp z < 0	1000	+	-1.5	-1	1.5	-1	1.5
					83.6		67.2

cc:

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