

## HALO LOAD CALCULATION FOR INNER LEG OF VACUUM VESSEL

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- In the event of a radial disruption, halo currents will be generated on the center stack casing(CSC). Forces due to the interaction of these currents with the toroidal magnetic field have been evaluated.
- 40% of the initial plasma current of 1.0 MA was assumed to flow into and out of the CSC with a toroidal peaking factor of 2.0 (i.e., the sinks and sources of current vary as a function of toroidal angle as  $1 - \sin(\phi)$ , and the net of all sinks and sources of current separately sum to 400 kA).
- The vertical separation distance between the sources and sinks was assumed to be 1.0 m.
- The poloidal fields used in the force calculations were extracted from TSC equilibria. The toroidal field was an ideal  $1/R$  TF field of 0.3T at  $R = 0.854\text{m}$ .