Faster Arc Response

Energy from the Power Supply dumped into an arc:

$$J = Isc^2 * R_{arc} * T$$

J : Power Supply Energy in Joules dumped into the arc
Isc: Short circuit current during the arc (Amps)
R_arc: effective resistance of the arc (Ohms)
T: time that the Isc is present (seconds)

Conventional TR and Controller	PowerPlus
Rating: 55 kVdc, 1000mAdc, 40%X	Rating: 70 kVdc, 1000 mADC
Isc: 2500 mA	Isc: 1300 mA
R_arc: .1 ohm	R_arc: .1 ohm
T: .00833 sec	T: .0000030 sec
J: 5.21 mJ	J: 5.1 uJ

The energy dumped into an arc by a PowerPlus unit is less than 1/1000th of the energy dumped into the arc by the conventional TR-SCR-CLR system.