

Subject: Cases 1, 2 & 3 at different T_0
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Dear Kirk et al.,

Attached are three more graphs, ITRVQ1t'.doc, ITRVQ2t'.doc and ITRVQ3t'.doc. Each is for comparison with the corresponding graph, sent yesterday, of the same name except for the absence of the prime. Each new graph differs from its predecessor only in initial temperature. Most noteworthy is the effect on dissipation in the magnet. For Case 1, Q is only 1.2 MJ when pulsed from 70 K, compared to 2.6 MJ when pulsed from 84 K. For Case 2, Q is 5.6 MJ at 70 K, compared to 7 MJ at 74 K. For Case 3, Q is 18 MJ at 35.5 K, the maximum temperature from which the magnet can reach 7200 A, compared to 13 MJ at 30 K.