

NOTES:

- 0 This plan created in response to BTeV request Aug 01 for FY02 planning. Planning started with nominal end of FY #5 and working backwards (or forwards) as needed.
- 1 These are the Q2 and Q1/Q3 main "LHC-type" Quads. Need ICB for them, tested horizontally. \$ and schedule taken directly from current LHC plan, no additional scaling. Cryostat and test actually 1.5 months each, rather than 1 and 2 months, respe
- 2 These are the Q4 and Q5 "LHC-type" Quads (J. Johnstone, 12/27/00 note). Made in IB3, tested in VMTF. Cryostat and test operations reversed. Cold Mass assembly derated slightly from LHC for length (5/6). Others same.
- 3 Production for LHC type quads, jsk wag based on current LHC experience.
- 4 Test stand cost based on LHC cryo only (1.1.1.4.1.1 as of July 01). Although stand should be simpler, total cost for LHC stand was higher, so maybe balances out. Procurement & delivery 18 months. Commissioning with first magnet? Needs interfa
- 5 Up front hard work to define stuff such that details can actually be done. JSK WAG. Estimate of AP effort needed is complete SWAG. Needs to fit in this timespan.
- 6 Cable \$ and duration based on LHC experience. Cold mass design mods --no cross section, length only, change drawings and order qty. Steel cost a SWAG. May end up buying a whole mill run. Other cold mass costs taken from sum of LHC produ
- 7 Tooling rework due to length changes...assy mandrel for shorter magnets; reprogram ICB winding machine for shorter length, + new curing mandrels so straight length no too long; storage mandrels etc
- 8 Based on LHC experience. Assume LHC cross section the same, still many details of interfaces, hook ups, correctors, vacuum. Not clear LHC cryostat sensible for short versions. Costs taken from KEK type cryostats, scale for Qty, but not for lengtl
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- 13 Integration "Soul" at best comes from early design work (note 5). No 'type' spec'd as it can be one of many, depending on exact person. Possible not in TD.
- 14 Management Victim is TD. Also best if from early design work. No "type" sec'd as it can be one of many, depending on exact person.
- 15 EE/Phys is a electrically knowledgeable person, good w/ power supplies, leads, etc. Cryo is a Cryo systems expert. AP is BD AP. Others are fairly std classifications
- 16 FTE costs estimated at 50k\$ for tech, lead tech, drafter. All others 100k\$ each.
- 17 Magnetic Element Production and Test to 1 vendor - be better if we had 2 vendors always involved from the start
- 18 Leads GFM to final assembly vendor
- 19 Spool DFBX - like - 21 enough for 2 vendors?

Phys	Totals:	0.75	FTE Phys	Totals:	FTE Phys
Mech Engr		1.75	FTE Mech Engr		FTE Mech Engr
EE/Phys			FTE EE/Phys		FTE EE/Phys
Cryo			FTE Cryo		FTE Cryo
Designer			FTE Designer		FTE Designer
Drafter		0.50	FTE Drafter		FTE Drafter
AP			FTE AP		FTE AP
Lead Tech		1.00	FTE Lead Tech		FTE Lead Tech
Techs		20.50	FTE Techs		FTE Techs
Soul		0.00	FTE Soul		FTE Soul
Victim		1.00	FTE Victim		FTE Victim
	M&S		300 k\$		k\$
	-FTE		1450 k\$		0 k\$
				Sum M&S	9617
				Sum Labor	4738

actively.

prices defined.

production costs (1.1.1.2.4 and .5) and scaled by equivalent LHC magnet lengths ($C0 = 7$), probably underestimate due to end part counts.

h.