SI/Mi. BR/72-16
21.7.1972

Notes on the Linac - PSB Coordination Meeting of the 20th July, 1972

Present : C. Bovet, H. Haseroth, F.H. James, J. Knott, H. Koziol, G. Nassibian, K.H. Reich, T.R. Sherwood, P. Têtu, G. Visconti, I. White.

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1. Linac operation for PSB runs

(a) Operation

After changing the tank 2 compensation FTH tube, the situation should improve. To further help with PSB runs, Linac people suggest to nominate two specialists who would concentrate on looking after "PSB settings" of the Linac. This would be welcomed by the PSB people.

(b) Beam properties

Pulse length : up to 75 μs into PSB, PSB value into EL,SL without choppers if through MCR, with choppers if through LCP.

It is planned to go to 100 μs during the August shut-down.

Intensity : 80 mA could be obtained if the PSB were the the only user. As a parasite, the PSB can expect 70 mA if all goes well, but 60 mA would be more usual for the moment (44 mA unchopped were obtained as an average over the last three months). 100 mA remains the goal, to be reached by the combination of several (partial) measures.

ΔE : For long pulses, energy spread is minimised on the basis of the analog signals from the spectrometer, with encouraging results, at least for part of the pulse duration.

The result is satisfactory for multiturn injection, but for monoturn injection, any changes at the beginning of the pulse are rather inconvenient. This can be improved by a different optimization.

It was also observed that sometimes the mean Linac energy changes by 80 to 250 keV for several minutes. Linac people will look into this.

Slow drifts could be taken up by dephasing the debuncher.

Reproducibility of transverse beam position : on bad days this position changes from pulse to pulse (by half a beam diameter) on ITV1.

2. Current work (MPS-SI/Mi. BR/72-1)

(a) Timing

G. Gelato is proposed as coordinator, as asked for by D. Dekkers.

(b) 3 MHz chopper

The definite version is to be installed in the August shut-down. If helpful to Linac people, the chopping could be restricted to 8 μs. This will be tried on Tuesday 8th August 1972.

(c) Spectrometer

Display is being improved.

(d) I-Q

No progress.

(e) Analog signal display

Progressing, wanted soon.

(f) ISV

Signal transmission still in doubt. Septum No. 2 ready, septum No. 4 to be ready on 25th July; installation to be confirmed after beam No. 1 observation by C. Bovet.

(g) I-TR

Integrator to be made by Rabany.

(h) I-U

Five are installed, Cheretakis will propose a programme for their putting into operation (including calibration etc.).

(i) Optics

Progressing.

K.H. Reich

Distribution

Persons invited, informed, present and named
RIC
G. Brianti, P.H. Standley, C.S. Taylor