Tuesday 7 June 1994
K. Reece
RHIC

Minutes of meeting: RSC sub-committee, Monday 6 June 1994.

Present: R.Frankel, S.Musolino, A.Stevens, K.Reece

Subject(s): 1. RHIC transfer line shielding.
2. RHIC access controls.

1. Referring to a memo [Stevens to Musolino 06/02/94, attached], A. Stevens presented his analysis of the estimated dose rate external to the RHIC transfer line due to a 100% beam loss. Given the operating assumptions for repetition period and maximum intensity, the maximum external dose equivalent rate along this line is 12.2mrem/hr. Alan's calculations include estimates through labyrinths which were also done by P. Gollon [Ref. 4 in memo]. On the basis of these calculations, it was proposed that the initial beamline commissioning be done at the intensity and repetition rate as noted and that chipmunks would be used as the active interlocking devices for this period; not active beam current sensors/limiters or other rate limiting devices.

It was requested that the full RSC committee meet for a presentation and review of these estimates. Ref. 1 in the memo noted above can be found in the RSC Meeting Minutes file from a meeting held on 11/6/92.

2. R. Frankel's proposal for the access controls for RHIC [transfer line (including g-2), arcs and ring] is similar to that presently used at CEBAF. This is a PLC based, dual redundant system. Bob has constructed a majority of the program logic and will be writing the code for one of the two systems. The code for the other system will be written independently by another engineer in the RHIC access controls group.

I have asked a sub-committee of the RSC (A. Etkin - chair, W. Glenn, A. McGeary) to review this proposal and report their recommendations to the full committee. Bob will be ready to present an overview of this system to the full RSC within the next two weeks (the sub-committee review will be ongoing).

An existing sub-committee (W. Glenn, A. McGeary) is in the process of reviewing the RHIC transfer line security gate locations and "beam crash" system.

cc: RSC committee.
RSC file.