



Radiation

Safety

Committee

Minutes of Sub-Committee review for RHIC 4 O'Clock PASS

Present: D. Beavis, Asher Etkin, and W. McKay

The storage and acceleration RF cavities are in the PASS zone of 4 o'clock (peer 9). A request has been made to operate an appropriate subset of the final PASS system at 4 o'clock. The subsystem will provide protection for testing of the RF cavities. This request has been made to allow for timely testing of the RF system and to continue work on the other parts of the PASS system.

The worst case dose rate from a cavity is expected to be 200 rads/hour. The typical dose rates are expected to be substantially lower. The cavities are clustered into several groups in the tunnel and in the 4 o'clock IR. It was decided that a dual interlock system was appropriate for these dose hazards and therefore the PASS system should be used.

The final details of the system were not reviewed. A. Etkin will chair a sub-committee, which will review the details of this provisional operation.

The following items were noted or discussed:

- 1) The system will use the existing PASS hardware, which has been installed for the final configuration.
- 2) The provisional system will have standard RHIC configuration control.
- 3) The system will be commissioned with the usual stringent acceptance tests.
- 4) The gates will be appropriately posted.
- 5) The crash system will be active in this zone.
- 6) There will be a written sweep procedure and personnel will be trained.
- 7) There will be an appropriate check-off list before initial turn on of the RF cavities.
- 8) The switch for turning off the RF cavities by the interlock system must be dual, properly secured, and have an appropriate engineering review.
- 9) The area will be swept and secured by a well-defined group and they must properly secure the keys for area reset.
- 10) There will be a mode for controlled access.
- 11) The vents to the tunnel must be appropriately secured.
- 12) The shield walls at the 4 o'clock IR have small cracks. Fencing around the IR may be necessary with appropriate posting.
- 13) Access to the tunnel under the slab should be appropriately controlled. 

The pending subcommittee reviews will insure that the above items are incorporated into the detailed system.
(CK-RHIC-4-1: A. Etkin) 148