## PS-AD problem on the 16/05/2001

On the night of the 16/05/2001, after an alarm in a PS-AD zone, the MCR tried to acknowledge it with the standard procedure. After they didn't succeed the attempt, they called the "ST/AA/Access control piquet". The alarm had stopped the primary injection because this is the safety procedure in case of intrusion in a zone due to the possible irradiation danger for people.

The ST/AA/Access control piquet tried to execute the standard procedure and since this didn't result in bringing the system to normal operation, they tried to restart the system from scratch, so they stopped the local machines, the local PLC's and the Crate PLC. The whole system restarted correctly with the exception of the Crate controller PLC (the main safety PLC). This PLC had lost the software program saved in memory and since GTD, the contractor who had developed the system, had not saved the program in the PLC EPROM, the PLC had not the program to be run.

This situation put a veto to the injection level and caused the PS AD experience stop.

The ST/AA/Access control piquet did not have the PLC programs nor the procedures to restart the system until GTD provided them the next morning at 9 a.m.

Due to the PS requirements, the PS AD access system, developed by GTD under the C168 contract, was put into operation on the 12th of April. The system has not been accepted by CERN yet because several non conformities (not affecting the security) were found at the provisional acceptance test held on the 4/5/2001. A 2nd last date for the provisional acceptance is planned for the 11th of June.

A piquet for the Operation and Maintenance of the PS AD system outside working hours has not been foreseen under the C168 contract as ST/AA/AC has its own piquet.

The contractor has not yet provided the latest programs versions nor the technical documentation. Nevertheless, CERN has asked the Contractor to provide the Operational manuals which were given to both ST/AA/AC piquet and PS AD control room operators on the 16th of May. The latest programs versions of the PLCs and the local and central SCADA should be provided on the 13th of June, after the final commissioning of the PS-AD access system (planned for the 11th of June). All the project documentation should be provided by the end of June.

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