

## **Minutes from meeting on operational aspects of ISOLDE Tuesday 7/5 -91**

### Present

J.D.Schnell, G.Daems, G.Cyvogt, E.Kugler/PPE, K.Elsener/PPE, D.Fiander, A.Fiander, A.Fowler, K.Gase, H.Fiebiger, K.Schindl, H.Schönauer, E.Wildner-Malandain

There have been a few discussions since the meeting was held. I try to make a synthesis. Any comments on the minutes are welcome.

### **Timing requests for 60kV power supply**

D.Fiander presented the timing requests for the 60kV pulsed power supply.

Two sets of timing will be needed

- 1) for decharging of Astek powersupply
- 2) for the electrostatic deflector for the secondary beam, diagnostics

Timing delivered

- 1) FEJ
- 2) WEJ
- 3) BX.TRISOLDE (WEJ + 1/2 booster rf period; this means that the 35  $\mu$ s before beam on target plus fly time can be done locally)
- 4) at least the first kicker timing for ejection from booster (e.g. BX3.SEKFA for the standard case)

all gated by the ISOLDE condition in the PLS

Precision: +- 10 ns

Gilbert proposes a timing zone for ISOLDE. Special meeting for this to be held.

The interface built by J.D.Schnell will not carry signals from ISOLDE to the standard control system (error indications etc.).

### **VETO signal**

If there is a problem with the pulsed power supply the beam has to be stopped before it arrives at the target. This is known only 10  $\mu$ s before the first ejection kicker timing (this means with the 35  $\mu$ s for the

decharging 45  $\mu$ s in total from ejection + fly time). So the only way of getting rid of the beam is to dump it in the booster ring. Problems: the kickers stay charged. Possible consequence: saturation of transformers. Discussions after the meeting concerning this problem have given doubts whether this blocking should be necessary or covered by the "slow" beam blocking via the LINAC tail clipper (See below). One cannot be sure that, under critical conditions, the beam will not hit the target.

An interlock blocking the LINAC and the kickers will be set by the  $\Sigma$  problem conditions signal given by ISOLDE gated by the ISOLDE condition in the PLS. This means that there will be no beam from the next ISOLDE cycle onwards. A manual restart is needed. Means of testing before restart (all timing conditions) are important.

F.Labeye will be asked for the transformer problem.

13/6 -91 Elena Wildner

#### Distribution

G. Cyvoct  
G. Daems  
K. Elsener/PPE  
H. Haas/PPE  
E. Kugler/PPE  
C. Metzger  
K. Schindl  
J.D. Schnell  
D.J. Simon

#### Pour info :

B.W. Allardyce  
J. Boillot  
C. Carter  
G. Gelato  
H. Haseroth  
H. Ravn/PPE  
J.P. Riunaud  
H. Schönauer