

Summary of run meeting 8 August 2011

Present:

Andy Nichols Tim Hayler Pierrick Hanlet Gail Hanson Linda Coney Victoria Blackmore Lucien Cremaldi Alan Bross Yagmur Troeun Paul Hodgson Henry Nebrenski Galina Vankova Adam Dobbs Mike Zisman Mike Courthold Maurizio Bonesini Ruslan Asfandiyarov Ken Long + Anyone I forgot

Charge:

to discuss the consequences of the target failure and the running schedule of MICE between now and March 2012. The baseline assumption is that we replace the target with a new one in December-January and run with it for the 'EMR run' in March. The question is if we need some additional running in October-November.

TRANSPARENCIES:

http://mice.iit.edu/pc/pc477/pc477.html

Agenda

- 1. Report from Target: what happened and plans Hodgson
- 2. What data have been taken in June-July 2011 Victoria
- 3. ISIS schedule in Q4 2011 and Q1 2012 Pierrick
- 4. PM comments consequences of additional running Nichols
- 5. EMR <u>plans</u> Ruslan Asfandiyarov
- 6. Cherenkov needs Lucien Cremaldi
- 7. TOF <u>needs</u> Maurizio Bonesini
- 8. <u>AoB</u>:

Coney (online group), Rayner (analysis) Courthold (DK solenoid)

Notes.



A Boundary Conditions

- 1. Overall schedule (see next slide) restarts 19 Sep11, 14 Nov11, 6 Feb12 Insertion of new target in ISIS must be done in shut downs (best) or in run-ups but then must stop beam.
- 2. Target. Two possibilities
- T2.9 (with new shaft, and partly new optical fibers) install asap. after test in R78 (possibly in September still) run it until e.g. it breaks or replace for step IV.
- T3.x wait for new stator and brand new target. likely Jan 2012
- 3. Decay solenoid: power supply has signs of weakness. Needs understanding and repair. Ongoing

B Desires

- TOF needs to calibrate TOFO and TOF1 to be sure of quality of new tubes
 1 solid week of running
- 2. Cherenkov needs to demonstrate that it works

 Use TOF calib runs + 1 day of dedicated scan
- 3. Online Group needs to run MICE regularly and commission online reco
- 4. no need before March for EMR and Step I commissioning

120 days excl. down-time ÷ 75% = 160 days scheduled

Cycle no.	Start		Finish		Days			
•	Monday	8-Aug-11	Sunday	18-Sep-11	42	106.9		Shutdown (incl. TS-1 moderator change) [Summer Bank H. 29-Aug]
	Monday	19-Sep-11	Sunday	2-Oct-11	14			Run-up + machine physics
	Monday	3-Oct-11	Monday	3-Oct-11	1			Beam line permits
2011/03	Tuesday	4-Oct-11	Thursday	3-Nov-11	30	30.6	91.9	Cycle 2011/03
	Friday	4-Nov-11	Sunday	6-Nov-11	3			Machine physics
	Monday	7-Nov-11	Sunday	13-Nov-11	7			Short shutdown
	Monday	14-Nov-11	Sunday	20-Nov-11	7			Run-up + machine physics
	Monday	21-Nov-11	Monday	21-Nov-11	1			Beam line permits
2011/04	Tuesday	22-Nov-11	Thursday	22-Dec-11	30	30.6	122.5	Cycle 2011/04
	Friday	23-Dec-11	Friday	23-Dec-11	1			Machine physics
	Saturday	24-Dec-11	Sunday	5-Feb-12	44			Shutdown
	Monday	6-Feb-12	Sunday	19 - Feb-12	14			Run-up + machine physics
	Monday	20-Feb-12	Monday	20-Feb-12	1			Beam line permits
2011/05	Tuesday	21-Feb-12	Thursday	29-Mar-12	37	37.6	160.1	Cycle 2011/05 — provisional
	Friday	30-Mar-12	Sunday	1-Apr-12	3			Machine physics
	Monday	2-Apr-12	Sunday	29-Apr-12	28	98.9		Shutdown (incl. TS-1 moderator change) [Easter 06–09-Apr]
	Monday	30-Apr-12	Sunday	13-May-12	14			Run-up + machine physics [May Bank H. 07-May]
	Monday	14-May-12	Monday	14-May-12	1			Beam line permits
2012/01	Tuesday	15-May-12	Thursday	14-Jun-12	30	30.6	30.6	Cycle 2012/01 [Spring Bank H. 28-May] — very provisional
	Friday	15-Jun-12	Sunday	17-Jun-12	3			Machine physics
	Monday	18-Jun-12	Sunday	1-Jul-12	14			Shutdown
	Monday	2-Jul-12	Sunday	8-Jul-12	7			Run-up + machine physics
	Monday	9-Jul-12	Monday	9-Jul-12	1			Beam line permits
2012/02	Tuesday	10-Jul-12	Thursday	9-Aug-12	30	30.6	61.3	Cycle 2012/02 — very provisional
	Friday	10-Aug-12	Sunday	12 - Aug-12	3			Machine physics
	Monday	13-Aug-12	Sunday	16-Sep-12	35			Shutdown [Summer Bank. H. 27-Aug]

Pierrick Attached is the latest ISIS schedule. Although formally the Feb-Mar 2012 cycle is still provisional, I'll be very surprised if we don't run it as scheduled. David



Conclusions

will run for TOF/Cherenkov/Online in the fall ISIS user run, for two weeks, conditional to:

- 1) debugging the new target
- 2) having a fully reliable decay solenoid
- 3) the TOF/CKOV/online champs (c/o Maurizio, Lucien and Linda) being present

Additional circumstances

- -- BPM will be taken out of beam (Craig to disconnect)
- -- Linearity of quads to be measured with Hall probes
- -- downstream detectors (TOF2, KL) are not in the way of step IV plates installation
- -- if delay in step IV installation is serious, we will try to recover some time from March 2012 run.