

**Minutes of meeting regarding SM 18 operations with respect to the test program, test functioning and test problems, support for tests held on Monday 28<sup>th</sup> July 2003**

**Notes taken by : Daniel Babu , 28 July 2003**

**Venue: string control room**

**Present:**

Louis Walkiers, Vinod Chohan, Ismael Vadillo, Claude Niquille., Kevin Priestnall; Sanjay Malhotra , Jackie Mazars ; Pramod Radheshyam , Madhu Jathar, Uttam Bhunia, Satish Shankar Shetty, Ramkumar Narayanan , Daniel Babu, Florence Pirotte, Sridhar Sethumadhavan , Apollo Kasliwal , Mohan Krishna Khare , Prashant Pareek

**Suggestions and remarks by operators:**

- Better way to be found to enter magnet names and tests in the white board so that completion of tests can be marked clearly.
- Freeze the test sequence for the normal magnets. It is seen that test coordinators add tests just because operators are free.
- Improve the hardware integrity and availability
- Presently problems with rotary switch, cable water, power converter, **MMP hardware like motor, encoder, end stops, amplifiers**, power supply for minimum energy quench etc.
- **Software: TEMA behaves very inconsistently in cluster C. TEMA not loading proper configuration files to local sun station. Lot of unnecessary alerts and errors are shown and it is not clear how to go ahead with the tests in such cases.**
- Equipment support work definition not clear.
- Many times the specialist for the equipment has to be called. If they can be called directly in daytime, testing time can be saved. Equipment support should be available in night and also on weekends.
- Piquet are seen not to keep magnet settings etc ready in time, because of which we have to repeat many tests.
- File transfer between servers takes lot of time. Especially to get IAP files and quench files. This clearly adds to the testing time duration.
- For many tests there should be quick tests for visualization of the results so that the operator can decide that the test is finished successfully
- **Writing reports and preparing reports are not operators job.**
- TRU connection and disconnection is very tedious. Sometimes it has to be repeated due to bad management of shafts.
- Data extraction and handling to prepare conformance reports is quite involved due to the following:
  - Data is to be fetched from various sources like log books, server database etc.
  - Lot of backlog comes usually as data required is generated over various shifts

- Even for test not conducted by SM 18 operations staff the conformance reports are to be filled.
- Since data analysis or verification is not done online (for many tests like RRR, joints etc) at the time of final calculation it may so happen that the data cannot be extracted at all and the magnet itself is not available.
- It takes around 11 hours to complete all the conformances for one magnet and that too by a trained operator.
- At the control room there should be better provisions for kitchen, lockers, eating table, coat hangers etc.
- There are not enough working PCs in the office cabins. At least two working PCs are required in each room.
- Now four people are sharing the room and it is difficult especially in the summer with out any fans or proper ventilation.

#### **Remarks from Louis Walkiers.**

- Skilled manpower is required for testing of magnets and it calls for a lot of collaboration from the part of the operators with equipment support, software developers etc.
- Procedures written by operators and not approved ones should become **defacto procedures** .
- Present procedure may not be fully formalized and hence may require modifications.
- **Operators will have to continue with the job of writing conformance reports for power tests and HV tests till a better ,easier solution is found.**
- Call test coordinators only on emergencies otherwise follow work to-do lists.
- **As far as possible do not call piquet who is not on call as they are busy with commissioning of new clusters.**
- The to-do list is being modified substantially so as to finish the entire test in 48 hours. This will be for the normal magnets with one thermal cycle.
- For magnets with problems the test coordinator will decide additional tests to be performed. And for magnets to be rejected this could be quite extensive.
- **Some of the electrical tests will be shifted to sma18.**
- **If a definite proposal for better quench tables comes up it will be considered.**
- Control room will be modified for 6 clusters.
- **Provisions for kitchen eating table and coat hangers are already taken up and will be soon implemented.**
- **As far as PCs are considered providing new PCs for all is impossible.**
- For the Indian collaborators all issues regarding housing to be settled with DAE India.