PHENIX

Muon Arms MiniTAC Highlights

Muon Arms VTC

April 29, 1998

W. Wayne Kinnison

Muon Arms MiniTAC Review

- **Date: May 7 – 8, 1998**
- **Location: Brookhaven National Laboratory**

Charge for MiniTAC

- **The review committee should determine the current status of the Muon Arms effort and the prospects for timely completion of its various parts. In particular:**
  - MuID panel installation in the Experimental Hall by September, 1998.
  - Cost estimate and schedule for MuTr FEE.
  - Fabrication and installation schedule for MuTr chambers.
  - Performance of MuTr without anode readout or without a third gap in tracking station 3.

Scope of MiniTAC

- **MuTr and MuID, mechanics, FEE, software**
- **Cost and schedule for fabrication, installation and commissioning**
- **Descoping and/or deferral plans, including performance studies of descoped/deferred configurations.**

Agenda

Thursday, May 7, 1998

Plenary Session

900 -	930	Introduction and Role of Muons in PHENIX Physics Program	- B. Zajc/S. Aronson
930 -	1000	The PHENIX Muon Arms: Scope and Overview	- W. Kinnison
1000 -	1045	Performance Studies of Muon Arms	- M. Brooks
1100 -	1115	Break and Reconvene in Parallel Sessions	

Parallel Session A - Muon Tracking

1115 -	1245	Muon Tracking Mechanics	- D. Lee
1245 -	1400	Lunch	
1400 -	1600	Muon Tracking FEE	- T. Carey
1600 -	1615	Break and Reconvene in Plenary Session	

Parallel Session B - Muon Identifier

1115 -	1245	Muon Identifier Mechanics	- K. Read
1245 -	1400	Lunch	
1400 -	1600	Muon Identifier FEE	- V. Cianciolo
1600 -	1615	Break and Reconvene in Plenary Session	

Plenary Session

1615 -	1645	Summary Cost and Schedule Issues	- W. Kinnison

Friday May 8, 1998

900 -	1200	Executive writing session	- Committee
1200 -	1245	Closeout	- Committee

Descoped and Deferred

- **Items removed from the scope of the project**
  - Five gaps of Muon Identifier Panels
  - Read out only 2 gaps of Station 3 tracking chambers
- **Delayed delivery (not in first year of running)**
  - North Muon Arm
  - Anode readout for Muon Tracking

Cost Summary - AEE

AEE Funding (no contingency)

Fiscal Year	1996	1997	1998	1999	2000	2001	Total
MuTr Mech		1,097.2	691.8	412.2	1,224.6		3,425.8
MuTr FEE		623.0	744.0	560.0	1,114.1	978.5	4,019.6
MuID Mech		355.5	2,376.3	149.5			2,881.3
MuID FEE		85.8	471.9	326.6	170.7		1,055.0
ARCNet				4.9		5.1	10.0
Timing & Control				81.5		87.2	168.7
DCM's			124.0			372.0	496.0
Total	0.0	2,161.5	4,408.0	1,534.7	2,509.4	1,442.8	12,056.4
Cum Budget Req.	0.0	2,161.5	6,569.5	8,104.2	10,613.6	12,056.4	
Allocations	750.0	2,625.0	2,800.0	1,400.0	3,200.0	625.0	
Cum Allocations	750.0	3,375.0	6,175.0	7,575.0	10,775.0	11,400.0	
Budget - Expense		1,213.5	(394.5)	(529.2)	161.4	(656.4)	

Cost Summary - RIKEN

RIKEN Funding

Fiscal Year	1998	1999	2000	2001	Total
MuTr Mech	918.1	845.3	99.8		1,863.2
MuTr FEE	44.7	1,014.2	0.0	637.9	1,696.8
MuID Mech	400.0				400.0
MuID FEE		75.0	73.0		148.0
Muon Totals	1,362.8	1,934.5	172.8	637.9	4,108.0
LVL-1		112.0			112.0
ONCS		95.0	95.0		190.0
All Other Items					2,847.8
Total RIKEN	1,362.8	2,141.5	267.8	637.9	7,257.8
RIKEN Budget Total					6,218.1
Budget - Request					(1,039.7)

Schedule Summary

- **Engineering Run (October 1998 – July 1999)**
  - Mechanics of Muon ID plus advanced prototypes of Muon ID readout
- **First year of running (October 1999 - May 2000)**
  - Muon ID will be mechanically complete
  - Muon ID readout before end of the run (may make beginning of run)
  - South Muon Arm Tracking ready by late Jan. or early Feb. 2000 (cathodes only)
- **Second year of running (October 2000 - May 2001)**
  - North Muon Arm Tracking ready