

SNuMI Meeting Agenda

- 1) Discussion of Phase 1/Phase II as campaign vs. project [Nancy]
- 2) Brief Update of Progress and Status [Alberto]
- 3) Discuss SNuMI expected readiness at the time of the review 14-Nov [Nancy/Alberto]
- 4) Discuss Draft Charge [ALL]
- 5) Reviewer's List
- 6) Discuss Draft Agenda

Draft Charge

Fermilab has prepared a “Super NuMI” (SNUMI) Plan for upgrading the proton accelerator complex in support of our neutrino-based research program following the cessation of Tevatron operations at the end of this decade. The goal for the SNUMI era is the delivery of at least 1 MW beam power onto the neutrino production target, based on effective utilization of accelerator facilities that will become available after the end of collider Run II.

The primary purpose of this Director's Review is to establish a baseline for Phase I of the plan (aimed at 700 kW), and to establish a viable strategy for Phase II (aimed beyond 1 MW). Within this context the committee will be asked to assess all aspects of the SNUMI Plan: technical performance goals and implementation strategy, cost estimate, schedule, and management structure.

The Phase 1 of the SNUMI effort is considered a “campaign” in the sense of the Run II Luminosity Upgrade and Proton Plan campaigns. That is the Phase 1 of SNUMI is not a “project” in the formal sense of a DOE project. However, selected project management techniques will be used in managing the campaign.

Draft Charge (continued)

Phase II is being considered a “project” in the formal sense of a DOE project. It is recognized that this review is being conducted at a very early stage of Phase II of the SNuMI project, thus it is a “preliminary” review and material presented will not be developed to the level of sophistication or detail of a more mature project.

As part of this assessment the questions listed in Attachment 1 of this charge should be addressed. The Director’s Review Committee is asked to present findings, comments, and recommendations in a closeout session with the SNuMI team, AD Management, and Fermilab Management at the end of the review and in a written report soon thereafter.

Draft Charge Att. 1

Technical

- Are the physics requirements that SNuMI addresses appropriately stated?
- Have these physics requirements been translated into accelerator technical performance requirements / specifications?
- Are the design features of the defined elements of SNuMI documented in a Conceptual Design Report, Design Handbook, or other appropriate manner?
- Are the prototype plans and decision paths appropriate for the less well-developed elements?
- Do the elements of SNuMI address the performance requirements / specifications? Are the designs of these elements reasonable?

Cost

- Has a Work Breakdown Structure (WBS) been developed?
- Do the cost estimates for each WBS element have a sound basis and are they reasonable?

Draft Charge Att. 1 (continued)

Schedule

- Is there a schedule for the project?
- Are the activity durations reasonable for the assumed resources?
- Has the schedule been “resource loaded?”
- Has the schedule been developed with contingency or slack included?
- For the less well-developed technical elements have decision milestones been included in the schedule?

Management

- Is there an appropriate management organizational structure in place or proposed to accomplish the design and construction?
- Have responsibilities been assigned or have they been proposed?
- Is there a Project Management Plan outlining the organizational structure, summarizing the technical, cost and schedule (including milestones) baselines, and setting forth the change control procedures and reporting processes that will be used?
- Are there adequate staffing resources available or planned for this effort?
- Is there a funding plan available or proposed to meet the resource requirements to realize SNUMI?

Reviewers

Name	Email	Acceptance	Note	Area
Ali Nassiri	Ali Nassiri <nassiri@aps.anl.gov>	Yes 11-Aug-06		
Phil Martin	Phil Martin <ptmartin@olympen.com>	Yes 23-Aug-06	PO is in place	
Stuart Henderson	Stuart Henderson <shenderson@ornl.gov>	Yes 7-Aug-06		
Thomas Roser	Thomas Roser <rosier1@bnl.gov>	Yes 7-Aug-06		
Yoshi Yamazaki	Yoshi Yamazaki <yoshishige.yamazaki@j-parc.jp>	Yes		
Tony Gabriel	Tony Gabriel <gabrielta@ornl.gov>, jkgabrielta@earthlink.net	Yes 30-Aug-06	Need PO to pay as consultant. Will be driving to review. Cell phone 865-382-8975	
Karen Hellman	Karen Hellman <khellman@anl.gov>	Yes 3-Aug-06		
Greg Bock	Gregory Bock <bock@fnal.gov>	Yes 7-Aug-06		
Dean Hoffer	Dean A. Hoffer <dhooffer@fnal.gov>	Yes		
Ed Temple	Ed Temple Jr. <etemple@fnal.gov>	Yes		
Erk Jensen	Erk Jensen <Erk.Jensen@cern.ch>	Yes 11-Sep-06	Request sent 5-Sep-06	RF
<u>Potential others:</u>				
Malika Meddahi (Deputy Project Lead on CNGS)				Beamline
Need radiation shielding person				
Tony Gabriel (ORNL/Retired) -	<jkgabrielta@earthlink.net>			
Marco Silari (CERN)	- <marco.silari@cern.ch>			
Sayed Rokni	- <rokni@slac.stanford.edu>			
Alberto Fasso	- <fasso@slac.stanford.edu>			

Draft Agenda

Tuesday, November 14

8:00 – 8:45 AM	45'	Executive Session	Ed Temple
8:45 – 8:55 AM	10'	Introduction	Steve Holmes
8:55 – 9:20 AM	25'	SNuMI Plan overview (phase I + II)	Alberto Marchionni
9:20 – 9:45 AM	25'	Beam physics issues (phase I + II)	Robert Zwaska
9:45 - 10:05 AM	20'	Booster present performance and upgrades (phase I + II)	Eric Prebys
10:05 - 10:20 AM		BREAK	
10:20 - 11:00 AM	40'	Recycler upgrades (phase I + II)	Paul Derwent
11:00 - 11:30 AM	30'	Main Injector present performance and upgrades (phase I + II)	Ioanis Kourbanis
11:30 – 12:10 AM	40'	NuMI upgrades (phase I)	Mike Martens
12:10 – 1:10 PM		LUNCH	

Draft Agenda (continued)

1:10 - 1:30	PM	20'	Outline of Accumulator upgrades phase II	?????
1:30 - 1:45	PM	15'	Outline of NuMI upgrades phase II	Jim Hylan
1:45 - 2:10	PM	25'	SNuMI Civil construction (phase I + phase II)	Dixon Bogert
2:10 - 2:40	PM	30'	Radiation safety (phase I + phase II)	Anthony leveling
2:40 - 3:05	PM	25'	Cost and schedule	Nancy Grossman
3:05 - 3:15	PM	10'	Proton projections	Alberto Marchionni
3:15 - 3:30	PM		BREAK	
3:30 - 4:30	PM	60'	Breakout sessions	
4:30 - 6:00	PM		Executive Session	

Draft Agenda (continued)

Breakout Sessions

Tuesday, November 14

- | | | | |
|-------------|----|-----|---|
| 3:30 – 4:30 | PM | 60' | Main Injector: RF system (phase I + phase II) |
| 3:30 – 4:30 | PM | 60' | Recycler: injection line, extraction line |
| 3:30 – 4:30 | PM | 60' | NuMI: primary proton line, decay pipe & hadron absorber
(phase I + II) |

Wednesday, November 15

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|---------------|----|--|---|
| 8:30 - 10:30 | AM | | Recycler: kickers, slip-stacking scheme,
RF systems (phase I + II) |
| 8:30 - 10:30 | AM | | NuMI: target chase cooling, target and horns (phase I + II) |
| 10:30 – 12:30 | AM | | Accumulator: transfer lines, momentum stacking, RF systems |
| 10:30 – 12:30 | AM | | Radiation safety/shielding (phase I + II) |
| 10:30 – 12:30 | AM | | Management/Cost/Schedule (phase I +II) |

Draft Agenda (continued)

Wednesday, November 15

8:00 – 8:30	AM	Executive Session	
8:30 - 12:30	PM	Breakout Sessions	
12:30 – 1:30	PM	LUNCH	
1:30 – 2:30	PM	Responses to questions from 1 st day	Alberto/Nancy
2:30 – 6:00	PM	Executive Session	

Thursday, November 16

9:00 - 1:00	AM	Closeout Dry Run	
1:00 – 2:00	AM	Closeout	