

## SCSC Meeting June 22, 2009

Short summary of meeting by Gunther Haller:

Richard Mount presented slides regarding future SLAC computing equipment power consumption.

All potential activities are included at SLAC, not just housed in building 50. Best guesses by Richard. One sigma is added to get the maximum, one sigma down for the minimum.

Curves do not include cooling. That adds between 40% and 60%

Clusters known around SLAC:

IR2 electronics house being implemented (~300 KW), future NEH server room, SSRL building 137 about 50 kW. Not including Stanford Computing facility.

Some clusters in SCCS only providing space.

Spread-sheet shows estimates by project, in Millions of \$.

*Action: members need to look what is missing and whether estimates are about right and if not what should be used.*

Row below cost in spreadsheet is power per \$M.

Tom D: Todd and Tom D estimates are fine. Faculty hires might need more and that is not included here. Tom might be able to estimate what the new faculty might need.

Tom will need to give some feedback to Richard since number will go up.

The new science building does not have cooling/power for clusters in the plan, so any new faculty would need processing elsewhere.

ALTAS Tier 3 is not included.

LSST estimates are too low, time and baseline. Also the minimum at SLAC should be estimated. Stuart to address.

Are there other KIPAC areas since there is no generic batch in the spreadsheet, (e.g. Tom Abel et al), Particle Astrophysics Theory.

How about speculative projects, AGIS possibly? (Richard Mount).

How about Super-B?

Issue might also be that project purchased resources will not be available for serial batch queues since they need control over the resources, then the generic model breaks down.

Accelerator Science uses external (e.g. Oakridge) computers which will continue to be the case. They have some computers in SCCS and it seems that more data will be brought back to SLAC for analysis, numbers need to be revisited.

Todd's and Tom D's lines need updating.

SSRL will need more than there is now but not clear where it will be found. Also can use Oakridge, etc. Lot of people are using serial batch system but would have used more if more would be available. Crystallography group, SSRL faculty, mixture of staff and PI's. Not users. Might need line for lab serial batch facility.

Mid-range cluster and generic serial batch lines should be added.

It might be problematic if people assume to use the generic one, not good for lab model?

LCLS data Analysis needs to be revisited, how about the SSRL Data Analysis? If SSRL uses larger detectors in the future, one might need to add.

LCLS data management and analysis should be separate lines.

Sub-council with dead-line in two weeks from this meeting estimates how much \$ they will have.

Richards estimate: 100kW/\$M.