Post-DAC Towards LOI

- DAC review was very favorable
- Encouraged to seek DOE construction funds
- To get on mass-shell for possible DOE FY05 construction $ we need to
  - submit LOI to DOE by March 03
  - include summary of LOI in BNL FWP, Feb 24
- DOE $ may or may not be there
  - capital expenditure is a possible "replacement" of AEE line

LOI

- Physics-case, performance, technology, schedule / budget
- Boundary conditions
  - cost to DOE < $5M, starting FY05
  - cost to RIKEN, $3M starting JFY04 (April '04?)
- Key decisions to be made before LOI deadline
  - what can be built for < $8M
  - what de-scoping maintains the most physics

Process

- Three parallel tracks of work for next weeks
  - cost estimates for everything (next slides)
  - which combinations are feasible constrained by costs, boundaries
    - e.g. barrel largely via RIKEN, endcap via DOE
    - two staged DOE projects, e.g. first \$5M towards barrel, 2nd later \$xM for endcaps
  - commitments from groups to say what they will work on
- Weekly Si meetings, weekly reports to Phenix management, finally a DC meeting?

Immediate Task

- Estimate costs, valid at LOI level, but these have a long-life….
- Two paths: individual items and scaling from comparable projects
- Costs for all construction items
  - both RIKEN/DOE estimates to figure out how to spend $8M
  - separate out R&D costs and construction costs
    - i.e pre FY05 and post FY05 costs
- R&D $ and leverage of other $, e.g. LDRD ORNL, LANL
  - match possible construction plan, e.g. possible application of LANL LDRD towards endcap electronics
- First report next Thur 23,7pm
  - first report due in to Phenix management Fri Jan 24
  - list of proposed responsibilities next page

Costs

- Mechanical, Dave Lee, Hideto
  - both HYTEC or in-house engineers (BNL/RIKEN)
- Si strips, sensors Yuji
- Si strips, readout (SVX4) + FEM->Phenix, Vince
- Si pixel barrel ALICE1 sensor+hybrids+bump+thinned via VTT, Yuji
- Si pixel barrel LHCBPIX1 sensor+hybrids+bump+thinned via FNAL, Craig O
- Si pixel FEM->Phenix, Axel
- Si pixel-endcaps, sensor+hybrids non-thinned, Pat/Dave
- Beam-pipe, Dave
- Systems integration, slow controls, Craig W?
- Scaled from comparable systems, Craig O