STATUS REPORT
on TECHNICAL/DESIGN RISK ANALYSIS

Ewan to RDR Mgmt
4/10/07
Updated for R&D Board
4/13/07

Status and Questions

- Attached is an updated spreadsheet summary of the latest versions of inputs from AS's. It now has four times T0 thru T4, where T0 is today. There are many additional changes in response to questions and more thought from JMP
- Q Is this moving in the correct direction? It is supposed to be both a summary and a tool.
- As the risk and cost numbers are qualitative, I now use only high, med, low and very low.
- Q Should the cost numbers (which need much work) be treated in a similar way? ANS---- Leave as numbers.

Status of Input Data

- Attached are the latest versions of the inputs from AS's.
- There is an attempt to discuss the risks and possible mitigations as a function of time. Not yet all in this format.
- Q We need to have these as living documents so where should they be kept (filed)? In an open or protected file?
- In most cases the SLAC area systems people HAVE consulted with there colleagues around the globe, and with me, but not all. The DR area will need the most work and help. There are so many questions on what should be assumed and therefore we need some meetings. SEE NEXT SLIDE

Status of Input Data CONT'd

- It would be ideal to have a face to face meeting with the RDR Mgmt and all the AS's to explain and discuss this work.
- Tor has suggested the morning of Wed 4/25 before the MAC and I suggest the Fri afternoon after the MAC. We probably need both!
- Perhaps, to solve the logistics of attendance we should have both, with Wed being the target for the majority.
- The Friday afternoon could then complete the "review" of the input and very importantly bring together the MAC review of the R&D plans with the purported risks!
- N.B. Not all risk mitigations need R&D, some, just more calculations and/or engineering development!
- BUT, THERE BETTER BE GENERAL CONSISTANCY.
- Barry----Suggests a meeting with R&D Board

Some questions which already are being raised for Mgmt guidance with CF&S Investment and Operating Parameters.

In many areas, a mitigation involves changes which require modifications to the civil layouts. This is not surprising as in reducing costs NO space was left without strong justification!

This has two effects.

The lowest cost approach to a problem that MIGHT require more space, is to decide sometime before T2 and have it in the civil contracts. Changing contracts or worse digging more after completion, sounds either expensive or not allowed. This forces a decision EARLIER than necessary from the technical component construction schedule, and when later the project is under budget and schedule pressure, Mgmt decides they must ACCEPT the higher risk and leave the space unused! (Not likely?)

Different examples

- E- INJECTOR
- Dual redundant injector needs bigger or twin tunnels that would not be used by single injector or others!

- E+ SOURCE
- Additional length of undulator (longer tunnels) would mitigate many problems which lower production yield.

- If not used by source then there would be a fight over who gets first choice of the space (redistributed!) along the linac!!

Summary for 4/13/07

- There is progress but much still to be done by all.
- This is work in progress and NOT a project plan.
- See new Risks Comments and Questions.xls
- This is before input from R&D Board

- This is not for presentation to the Cost Review. Too much detail and difficult to explain?
- For Cost Review----Overview and Methodology
  Discussion of some examples.
  Forward look at plans and process.

NEED COORDINATION and PLANNING with R&D TALK which will follow at the COST Review.