

ADI meeting – 3.02.2010 – very rough notes on Q / A session:

PHG Q on #1: Doing this step-by-step with different criteria. Are we saying we go ahead and make baseline changes before we complete the R&D?

MCR answer: basically yes. “Fully” complete R&D – there will still be stuff to do after the TDR.

PHG: doing this piecewise will give us a “moving target” from the cost/design perspective.

MCR: need to do cost estimate only once. We will need to understand the cost impact for each ‘change request’. (This is different from a moving target.) Major SB2009 changes will be done within calendar year 2010 (this is our goal).

VK: SB2009 WA, some are reasonably distinct and specific to an area system, some have broader (machine wide) impact. Need to prioritise (and schedule). VK expects most of this work in parallel.

VK: Damping ring question- putting low-p ring in 6km tunnel possible? Yes obviously possible. Effectively a cost study. MCR – reducing underground volume was our goal. May have to have four rings in tunnel, if FII in e-ring is an issue. Needs study.

Q&A – one by one through each attendee

Andrea – doing simulations for BC with factor 20.

Andrei – questions on keeping total project cost down, who is paying attention to other projects (more political questions)? MCR: in Pasadena we will focus on how to work hand-in-hand with the community (scope impact stuff).

PHG: early part of Pasadena meeting – AAP discussed L risk. Can we obtain  $500fb^{-1}$  in four years. What is our Ecm scaling on L? Will we get any more information on this? Andrei mentioned documented answers to Brau questions. Second version including Z has just been made available.

Enomoto: No comments.

Chris N.: Are all these WA to be in the proposal at the end of 2010? Specifically the single-tunnel – are we going back to the RDR twin-tunnel? What about RDR unit in a single (bigger) tunnel? MCR: our plan assumes re-baselining complete by end 2010 for the “big items” – and we assume that single-tunnel will be adopted. Further understanding and work on remaining ‘reservations’ in the interim. AAP encouraged us to pursue single tunnel. CN what if there reservations are not answered? MCR we will have to deal with that.

EJP: Penalties of RDR positron position solution – have we really studied all the cons? Do we have the resources to do these needed studies (in parallel)? MCR: yes. thinks we do not have an option - CFS resource issues. VK will need input (requirements) for the (parallel) design work.

Hitoshi Hayano – no comments

Jim C. – e+ source is in a quandary at the moment. How do we get to a decision on this? We can go back and study the undulator at 150GeV but this is not as mature as the SB2009 proposal. Noted deceleration. Not a cost decision. Physics / performance issues will decide. MCR – QWT issue not really part of SB2009? JC – true but this doesn't really change the main issue. QWT/FC will not help enough at low CoM energies. EJP an understanding of the real limits for the physics requirements – needs discussion with the physics & detector groups.

PHG: we don't know where the Higgs is, but we will be spending 'most' of our time there.

EJP: z-calibration. Marty thinks he doesn't need z-calibration.

Jim K: no comments. MCR: need more quantification of the cost of supporting the cavity spread. JK: for cavity spread we will have more statistics; RF side certainly needs to be more developed.

Mike H.: if you are looking at programmes that go a "long way" beyond 2012, this will not fly. TDR must be 'standalone'. MCR: that might be tough!

Nikolay S.: question on compressors. NJW answered to study shorter bunch lengths with a single-compressor (200um is a good goal). 'Upgrade' refers to adding a second stage later on if it seems useful (removing linac).

Shidara: developing Asian CFS design using Asian resources

VK: (slides provided).

John C: how do we see the main leverage (presume cost?).