TDR 17th Sept Snapshot Addressing EC Comments

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Broad comments

- *Dramatic progress has been made since the July snapshot. If similar progress is made by Arlington, will be a v. good document*

- *The general tone in the document isn't always convincing enough that the technology is mature and that we're ready to construct*
  - **Up front, need to be declarative of success and readiness**
  - **Some of the text and highlights could easily leave the reader with the impression that we're definitely not ready**

- *Too many layers of 'Introduction' and 'Summary' make reading the document monotonous in some places*

These items should be addressed through the top-level editing

Intros, SCRF, Main Linac

- Common Preamble, Introductions to TDR1&2 *(Brian)*
  - **Already iterated several times (Intros), and still need to reconcile differing perspectives**
  - **Brian + Barry will revise**

- TDR1 SCRF *(Mike, Eckhard)*
  - **Eckhard is heavily editing**
  - **Comments from Mike will be forthcoming**
  - **Add the Marx Modulator from TDR2 to HLRF R&D**

- TDR2 Main Linac + site variants *(Nick)*
  - **Nick is heavily editing, EC comments being integrated**

Post-TDR

- TDR1 Post-TDR R&D *(Barry)*
  - **Very important chapter, politically**
  - **Has been extensively worked on**
  - **Need to ensure we've had input from the Post-TDR LC Leadership. *What's the process for this?***

- TDR2 Scope of Post-TDR Engineering *(Marc, Barry)*
  - **Very important chapter, politically**
  - **Need to ensure we've had input from the Post-TDR LC Leadership. *What's the process for this? (Barry)***
  - **Not written yet - <u>must be finished for Arlington</u> *(Marc)***

Cost & Schedule

- C&S: Schedule section *(who to follow up?)*
  - **Poorly written + needs lot of additional technical content**
  - **EU site centric, nothing on Japanese sites**
  - **<u>Needs to be fixed by Arlington</u>**

- C&S: Costing *(EC + Gerry)*
  - **Detailed 80-page write-up for cost review but far too detailed for TDR + lot's of sensitive information**
  - **EC will make policy decision on level of detail for TDR**
  - **Gerry will generate condensed version for TDR**

Accelerator Systems, Upgrade & Staging, Evolution of Design

- TDR Accelerator Systems R&D *(Kaoru)*
  - **Address detailed comments from Toshiaki**

- TDR2 Accelerator Systems design chapters *(Nan)*
  - **Address detailed comments from Toshiaki**

- Evolution of the Design *(Maura)*
  - **Remove from TDR1, add to TDR2 as an Appendix**

- TDR2 Possible Upgrade and Staging Options *(EC)*
  - **Requires discussion with physics community at Arlington meeting, eg on Higgs factories, Giga-z**
  - **Leave as-is for Arlington, revise as needed thereafter**

Installation, Alignment, Handling Equipment

- **All three would need a lot of work!!**
  - **In the worst case, the bare minimum needed are cost bases of estimates to include in C&S chapter as needed**

- Installation + Handling Equipment *(Marc)*
  - **Heavily EU centric, don't include Japanese site**
  - ***Set a deadline for completion: 10 days before LCWS?***

- Alignment *(who to follow up?)*
  - **Mostly describes 'standard accelerator alignment'**
  - **ILC-specific alignment issues are mainly related to CM**
  - ***Eliminate Alignment as a stand-alone section***
  - ***Add a subsection on cavity and CM alignment to CM Integration section of ML Chapter***

Beam Test Facilities

- FLASH *(John)*
  - **Address detailed comments**
  - **Update with results from Sept 9mA studies run**

- NML *(TLE)*
  - **Doesn't paint an overall positive picture**

- CesrTA *(Kaoru)*
  - **Address detailed comments**

- ATF2 *(Kaoru)*
  - **"Needs to be updated with results from Oct-Dec run"**
  - **How to reconcile timeline with Arlington and PAC?**

Technical

- Important questions
  - **What can be accomplished from the technical editing and presentation perspective by the end of Arlington**
  - **Timelines for for freezing the content**

- Triage the known open items, eg
  - **Inconsistent use of terms and terminology, eg Baseline or Reference Design, or something else,…**
  - **Size and legibility of Figures and Tables**
  - **References**
  - **Formatting, style, page layouts, etc**

Top-level editing

- TLE Quartet:
  - **TDR1: Harrison, Carwardine**
  - **TDR2: Foster, Walker**

…with technical editing support from Maura and Benno

- A 1,000m look at the entire TDR for overall tone, self-consistency, level of detail, language, etc
  - **Likely will need specific help of editors**
- No time left for long drawn-out editing iterations
  - **Propose that TLEQ make final editing decisions on the content of the draft submitted to EC**

- Starts right away, so we need to collectively be on the same page with which sections/chapters are not yet stable