## TDR Part 1 Section 2.8

# Superconducting RF Technology: R&D toward massproduction and design for manufacture

Cavity - Mass Production / Plant Studies

- 1. EU
  - 1. XFEL (in process) 800 cavities, 2 vendors, 2 years
  - 2. Study for 18000 cavities, 3 years
- 2. Americas done, 6 yrs, 3600 cavities
  - 1. Sensitivity studies on yield; technique; qty from 1 to 10,000
  - 2. Material Material Material
  - 3. Plant layout, labor cost
- 3. Asia (in process) (J)
  - 1. Cavities..540 / yr

Draft/sometimes final studies just (!) received.

## TDR Part 1 Section 2.8

# Superconducting RF Technology: R&D toward massproduction and design for manufacture

### Cryomodule - Mass Production / Plant Studies

#### 1. EU

- Cryomodule Ass'y study (due in ~1 month)
  - 1. 650 or 1950 cryomodules; 4 years
  - 2. Parts / tested subassemblies delivered
  - 3. Plant + Labor for Incoming inspection  $\rightarrow$  delivery for RF test

#### Americas

- 1. Cryomodule Parts and Ass'y study (update of 2007 study) (Apr 2012)
  - 1. 450 cryomodules; 6 years
  - 2. Parts / subassembly costs updated as possible from ARRA experience (w/ lc)
  - 3. Plant + Labor for incoming inspection → delivery for RF test (largely unchanged)
  - 4. Some clarifications in next ~2 days

#### 3. Asia

- 1. Cryomodule Assy & Test Layout (J/E) (Apr 2012)
  - 1. 390, 975, or 1950 cryomodules; 6 years
  - 2. Assembly and Test Layout; touch labor + plant
- 2. Cryomodule Mfr Study (J/E) (Apr 2012)
  - 1. 390, 975, or 1950 cryomodules; 6 years
  - 2. Parts manufacturing study; materials and labor
- 3. Split Quad Study (J)

Draft/sometimes final studies just (!) received.