

Safety Systems for CLIC - PiP and PBS Update

Owain Williams HSE-SEE-XP

PiP

- Summary of required safety systems by Domain:
 - Mechanical
 - Chemical
 - Fire Safety
 - Environmental
 - Electrical
 - Biological
 - Non-ionising Radiation
 - Workplace
 - Structural Safety

PiP

- Key points identified:
 - The oil in the tunnel for the Klystron option represents the most significant hazard identified
 - A comprehensive environmental study will need to be commissioned at the moment that the project is given the green light to go into detailed design
 - HSE have been working with EN-CV and SMB to facilitate the implementation of the fire safety requirements

Fire Strategy

DB Option

- Fire compartment spacing = 439 m
- Fire doors to close if fire detected
- Hot smoke extraction

Klystron Option

- Fire compartment spacing = 439 m
- Fire doors to close if fire detected
- Hot smoke extraction
- Sprinkler system in the Klystron compartment

PBS

- Environmental Studies
- Environmental Monitoring
- Fire Detection, Alarms and Extinguishing
 - Baseline for the cost estimate agreed exact figures will only be available next week due to holidays
- Radiation Protection
- Cables to Access and Safety Infrastructure

