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PRINCIPAL LHCC DELIBERATIONS

17TH MEETING OF THE LHCC RESOURCES REVIEW BOARD

25 OCTOBER 2006

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SCIENTIFIC SECRETARY, LHCC

GENERAL

This document summarises the principal LHCC deliberations concerning LHCb at the Committee's sessions in May, June and September 2006.

Installation of infrastructure and technical services in the experimental area are well advanced. Installation of the UX85/1 beampipe and Vertex Locator window were completed successfully.

STATUS OF THE LHCb TECHNICAL DESIGN REPORTS

	<i>Submission to LHCC</i>	<i>Research Board Approval</i>
Magnet TDR	December 1999	April 2000
Vertex Locator TDR	May 2001	November 2001
Inner Tracker TDR	November 2002	February 2003
Outer Tracker TDR	September 2001	February 2002
RICH Detector TDR	September 2000	February 2001
Muon Detector TDR	May 2001	November 2001
First Addendum Muon Detector TDR	January 2003	February 2003
Second Addendum Muon Detector TDR	April 2005	September 2005
Calorimeter TDR	September 2000	February 2001
Trigger (L0/L1) TDR	September 2003	February 2004
Online System TDR	December 2001	April 2002
Addendum to Online System TDR	November 2005	December 2005
Computing TDR	June 2005	March 2006
Re-optimized Detector TDR	September 2003	February 2004

CONCERNS FROM THE PREVIOUS LHCb RESOURCES REVIEW BOARD

SUB-SYSTEM	CONCERN	STATUS
Vertex Locator (VELO)	Module production is on a tight schedule.	The VELO module production is well underway and assembly of the detector is to start soon.
Inner Tracker & Trigger Tracker	Module production is on a tight schedule.	Production of the modules is well-underway.
Muon System	Delays in MWPC production.	MWPC detectors for the Muon System are in production at all sites and the about thirteen hundred produced so far are of

		good quality. Production of the muon chambers is approaching completion.
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DETECTOR SUB-SYSTEMS

VERTEX LOCATOR (VELO)

The VELO module production is well underway and assembly of the detector is to start soon.

INNER TRACKER AND TRIGGER TRACKER

Good progress was reported on the Inner Tracker and Trigger Tracker.

OUTER TRACKER

Several investigations have been carried out to study the gain loss of the straw chambers. The gain loss can be minimized with the addition of 2.5% O₂ to the gas, by reverse voltage conditioning of the modules or by heat treatment of the modules. A fundamental understanding of the gain loss effect is still pending and the LHCC will continue monitoring progress in the investigations.

PARTICLE IDENTIFICATION

Good progress was reported on the RICH-1 and RICH-2.

CALORIMETERS

Good progress was reported on the Calorimeters.

MUON SPECTROMETER

Good progress was reported on the Muon Spectrometer, with production of the muon chambers approaching completion.

TRIGGER AND ONLINE SYSTEM

Good progress was reported on the Trigger and Online System.