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PRINCIPAL LHCC DELIBERATIONS

4TH MEETING OF THE TOTEM RESOURCES REVIEW BOARD

28 APRIL 2009

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GENERAL

This document summarises the principal LHCC deliberations concerning TOTEM at the Committee's sessions in November 2008 and February 2009.

Progress was reported on the completion of the TOTEM experiment. However, the LHCC considers that the schedule for completion of the TOTEM detectors prior to LHC beam in 2009 is tight for certain items.

CONCERNS FROM THE PREVIOUS TOTEM RESOURCES REVIEW BOARD

SUB-SYSTEM	CONCERN	STATUS
TOTEM read-out electronics.	The availability of the TOTEM front-end electronics is late.	Good progress has been reported on the full read-out electronics for the T2 Telescope and Roman Pot detectors. The production schedule for the T1 Telescope read-out electronics remains very tight.

STATUS OF EXPERIMENT

T1 AND T2 TELESCOPES

The last modules from a total of 70 Cathode Strip Chambers (CSCs) of the T1 Telescope are approaching completion. The assembly schedule of the T1 Telescope has slipped by about two months since November 2008 and the production schedule for the read-out is very tight. The schedule now has the assembled four half-arms ready by spring 2009, after which installation inside the CMS envelope may proceed.

The installation of the Gas Electron Multiplier (GEM) detectors for the T2 Telescope is following the CMS schedule. Half of the T2 Telescope is installed and there is no known conflict with installing the other half within CMS. The complete T2 Telescope is scheduled to be installed within CMS during spring 2009.

ROMAN POT STATIONS

All Roman Pots have been installed at the LHC and two Roman Pots at 220 m. either side of the interaction point have been fully equipped with detectors. TOTEM plans to equip with detectors all Roman Pot stations at these locations by early summer 2009. The evaporative cooling system for the Roman Pot stations has been commissioned successfully.

ONLINE AND OFFLINE COMPUTING

The new release of the offline software, including the Level-1 trigger simulation, was made as scheduled at the end of 2008. The planned work for 2009 includes production of simulated data for the first physics phase, optimization of the software performance, tuning of the simulation and reconstruction based on the commissioning with beam of the detector, and access to the conditions database for the calibration and alignment data.