



Status of MPE-MI Systems

Machine Checkout Tests and Commissioning

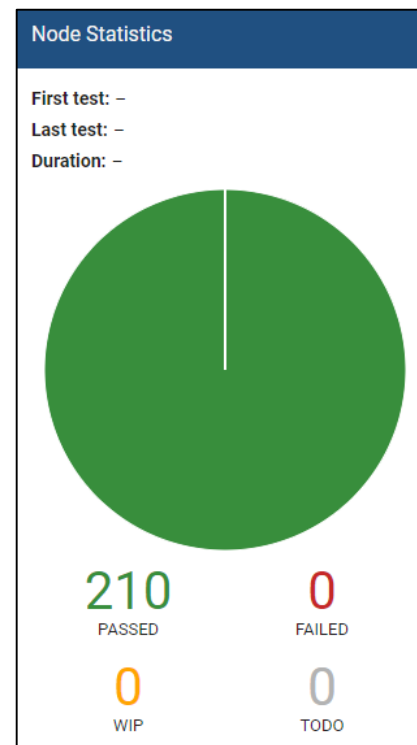
214th Machine Protection Panel Meeting

Raffaello Secondo

on behalf of TE-MPE-MI

22nd October 2021

- All Machine Checkout tests **completed** ✓






Hardware commissioning (100%) ✓

- All PIC1 and PIC2 tests have been carried out successfully, thanks to AccTesting.
- All Global Protection Mechanism tests (including Automated-GPM tests) passed.
- All PIC to BIC tests passed.
- CRYO tests passed.
- UPS / PIC tests passed.
- AUG tests carried out more than one year ago (passed)
 - > tests will be repeated during the YETS 21/22.
- Software and hardware limits tests for RSS circuits (EE bypassed) passed.
- Power Permit of the 60A circuits tests passed.
- SIS access conditions tests passed.

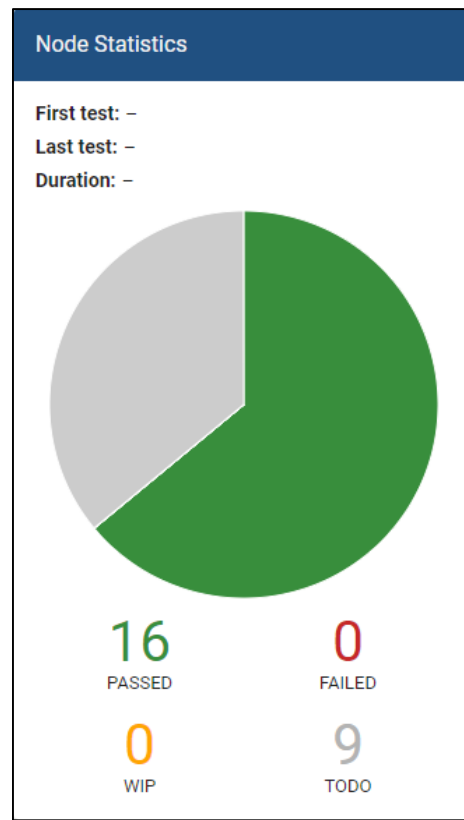
Beam commissioning (no PIC tests)

- We are currently experiencing a **problem** with the transmission of PP60A (WinCC OA)
 - Suspicion of automatic backup interfering with CMW, which may have caused the spurious loss of the 60A permits.
 - BE/ICS disabled the backup and no new events observed.

	MPP/PIC - IST2 - AUG	MPP/PIC - IST3 - UPS	MPP/PIC - IST4 - CRYO dump request	MPP/PIC - IST1 - PIC-CIBU Electrical compliance
LHC Point 1				
LHC Point 2				
LHC Point 3				
LHC Point 4				
LHC Point 5				
LHC Point 6				
LHC Point 7				
LHC Point 8				

	RSS (EE bypassed) 	PP60A	MPP/PIC - IST5 - SIS access conditions
S12			
S23			
S34			
S45			
S56			
S67			
S78			
S81			

- Communication tests **completed** ✓
- Machine Checkout tests **completed** ✓
- Beam Tests **to be performed:** ⌚
 - Test **SBF FALSE** with SBF_RESTRICTED (4E10)
 - Test **SBF FALSE** with SBF_BEAM_SETUP (3E11)



- Completed **IST**- LHC Ring BIS and Injection BIS ✓
- Completed **Commissioning** (SBF, LBDS, SIS...) ✓
- User Link connections** - responsibility of users/OP ⏳
 - LHCb connection (forced to TRUE)**
- LHC Injection BIS - MPS Tests**, connection USERS to BIS
 - Not part of the present MPS BIS tests
 - Has to be performed before **February 2022**
 - To be **added to the Checklist**

IP	Status
Collimation movement	Green
Collimation environment	Yellow
PIC	Green
Vacuum	Green
BLM	Green
FMCM	Green
WIC	Yellow
TCDQ & BETS-TCDQ	Red
RF	Red
ATLAS	Green
CMS & TOTEM	Green
ALICE	Green
LHCb	Red
BCCM	Grey
BPM	Red
Access system	Green
Operator push-buttons	Green
Programmed dump	Green
CIBDS	Green
Crystal collimator	Green
Beam screens	Green
Kicker systems	Green
SMP	Green
MKI test mode key	Red
MKQA	Green

