

1002 CeC/PASS interface, logic, and operation

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1. Pass shall interface with the various RF power amplifiers power source via two safety rated contactors, these will be designated contactor A and Contactor B, each controlled separately by PASS A and B divisions. There will be three RF amplifiers powering the, 500 MHz RF cavity, 112 MHz Gun, and the 704 MHz RF cavity.
2. A reach back circuit/logic may be provided through interface with RF chassis containing fast RF coaxial switches for the RF drive signals, if required.
3. PASS shall monitor the various RF amplifier ON/OFF status to allow deliberate changes to access mode only when PASS read back an OFF status from the power supplies.
4. The entire 2 O'clock Sextant (1z1, 2z1, 2z2) shall be swept/secured before enabling any of the CeC related critical devices.
5. Two RFID/solenoid releasable captive keys shall be installed on outside of the 1002A PASS A division enclosure. Each key shall have a security steel ring holding two keys, RHIC CA (14) and RHIC Sweep (15). The status (captured) of the keys shall be read by PASS. The key shall be captive for CeC hazard and RHIC Beam hazard operations.
6. A new Mode of operation Mode 26, RF NO ACCESS (RFNA) shall be provided for the 2 O'clock zones. This mode may be transitioned to directly from Mode 24(NA). All RHIC PASS captive keys shall be captive when commanding from Mode 16 (CA) to Mode 26 (RFNA) or Mode 24 (NA). The MCR RHIC key tree keys may be remove after 2 O'clock is in Mode 26 to allow access to the other RHIC zones and Mode 26 shall be retained.
7. Internal boundary gates:
 - 1GS1: Shall have new failsafe electromechanical locksets installed. Locked from the 12z2 side when 1z1=RFNA/NA and unlocked when 1z1 = RA OR CA. The lock shall always be unlocked from the 1z1 side
 - 3GI1: Shall have failsafe electric strikes with the door lock bolt fixed and non-retractable from either side of the gate. May be locked as commanded from either PASS 2 O'clock or from PASS 4 O'clock dependent on the 2z2 and 4z1 mode statuses.Both sides of both the inner and outer gates shall have emergency lock release buttons for emergency response or exit.

