MRI System Shutdown/Standby

1. Introduction

1.1. Research involving Magnetic Resonance Imaging (MRI) at high magnetic field strengths present unique hazards to both research subjects and individuals working within and around the MRI system. Consequently, the potential for serious personal injury is present due to the sheer size and strength of the static magnetic field along with the flexibility of the research system and associated peripheral hardware.

1.2. Working within and around the high field MRI requires in depth training on safety and Standard Operating Procedures, and documented proof of other necessary training. See SOP #30-02 “Safety Training Procedures”.

1.3. If you are unsure of any of the steps in any of the following procedures, DO NOT CONTINUE. Contact the Facility Director or MRI Technologist for further instruction.

2. Shutdown Procedure

2.1. On the operator console:

2.1.1. Select System ➔ End Session
2.1.2. A window will pop up with the following options
  2.1.2.1. Log Off
  2.1.2.2. Shutdown System
  2.1.2.3. Restart System
  2.1.2.4. Restart Application
2.1.3. Select “Shutdown System”.
2.1.4. A verification window will pop up. Click “Yes”.
2.1.5. Wait for the message, “It is now safe to turn off your computer”.
2.1.6. Press the “System Off” button on the Siemens control panel.
2.1.7. The system should be OFF at this point.

3. Standby Procedure

3.1. There are 2 ways to put the system into Standby.

3.2. First method: On the operator console:

3.2.1. Select System ➔ Control
3.2.2. The System Manager window will pop up
3.2.3. Select the MR Scanner tab
3.2.4. Click the “Stand By” button
3.2.5. A verification window will pop up. Click “Yes”.

3.3. The second method: press the Standby button on the Siemens Alarm Panel.
3.4. An error window may pop up as the system is shutting down the RF amplifier. This message can be disregarded.
3.5. The operator console will remain on but the gradient and RF amplifiers and magnet controls will be shut down.

3.6. The system is now in the Standby state.