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C-A OPERATIONS PROCEDURES MANUAL

2.6.3 Lockout/Tagout for the BOOSTER MMPS

Text Pages 2 through 3

Hand Processed Changes

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Approved: _____ *Signature on File* _____
Collider-Accelerator Department Chairman Date

P. Ingrassia

2.6.3 Procedure for LOTO for BOOSTER MMPS

1. Purpose

The purpose of this procedure is to instruct MCR Operators, how to perform Lockout Tagout (LOTO) for the Booster Main Magnet Power Supply in order to make the Booster Ring electrically safe for other workers.

2. Responsibilities

2.1 C-A MCR Operators are responsible for the execution of this procedure and the completion of the attached checklist.

3. Prerequisites

3.1 All personnel working on any electrical system or equipment in the C-AD shall be familiar with BNL [SBMS Electrical Safety](#), BNL [SBMS Lockout/Tagout \(LO/TO\)](#), [C-A-OPM 1.5, "Electrical Safety Implementation Plan"](#), [C-A-OPM 1.5.3 "Procedure to Open or Close Breakers and Switches and Connecting/Disconnecting Plugs"](#), [C-A-OPM 2.36, "Lockout/Tagout for Control of Hazardous Energy"](#). C-AD will provide on-site/work specific training to individuals in the electrical safety aspects of their job functions and assignments.

3.2 The target group for this procedure is the MCR Operators, and Operations support personnel.

3.3 When MCR operators perform this procedure they will fill out the checklist in [C-A-OPM-ATT 2.6.3.a](#). If this procedure is executed as part of a general Booster LOTO, then the MCR Operators will also fill out the appropriate Booster Ring Lockout/Tagout Checklist from [C-A-OPM Attachment 2.6.1.a](#).

4. Precautions

4.1 All personnel shall ensure their own safety by following the standards, safety rules, and the training they receive. In general, all energy sources must be locked out and tagged. Working on or near energized sources is not permitted unless a valid Energized Electrical Work (EEW) permit has been issued. Personnel shall utilize tools, instruments, equipment (e.g., proper connectors and proper ac line cords), etc., that are safe and proper for the job. If any part of a job appears unsafe to any individual it is their duty to discontinue work and inform the supervisor, manager, ESH Coordinator or the C-A ESSHQ Division Head, of the unsafe condition.

4.2 This procedure may be executed by itself or as part of the Booster LOTO process in general.

5. Procedure

Note:

This procedure shall be used in conjunction with [C-A-OPM 2.6.1](#) or [C-A-OPM 2.6.2](#) or [C-A-OPM 2.6.4](#). IF the special conditions of [C-A-OPM 2.6.2](#) or [C-A-OPM 3.11](#) are in effect, THEN the Operations Coordinator (OC) shall choose a Responsible Authorized Person (RAP) and Safety Watch Verifier (SWV) to install or remove the group LOTO on the MMPS.

- 5.1 The Operations Coordinator shall choose a Responsible Authorized Person (RAP) and Safety Watch Verifier (SWV) to install or remove the group LOTO on the MMPS.
- 5.2 Execute checklist, [C-A-OPM-ATT 2.6.3.a](#).
- 5.3 If the RAP discovers that systems specialists have turned off the power supply and locked and tagged it, he/she will remove the MCR-1A KIRK key and proceed as per step 5.5.
- 5.4 When checklist is completed, attach it to a page of Booster LOTO Log Book.
- 5.5 When finished with the checklist and the RAP has possession of the MCR-1A KIRK key, the RAP shall place the MCR-1A KIRK key into the Booster lock box in Bldg 914.

6. Documentation

- 6.1 Filled out [C-A-OPM-ATT 2.6.3.a](#), "LOTO for Booster MMPS Checklist".

7. References

- 7.1 [C-A-OPM 1.5, "Electrical Safety Implementation Plan"](#).
- 7.2 [C-A-OPM 1.5.3 "Procedure to Open or Close Breakers and Switches and Connecting/Disconnecting Plugs"](#).
- 7.3 [C-A-OPM 2.36, "Lockout/Tagout for Control of Hazardous Energy"](#).
- 7.4 [SBMS Electrical Safety](#).
- 7.5 [SBMS Lockout/Tagout \(LOTO\)](#).
- 7.6 [C-A-OPM 2.6.1](#)
- 7.7 [C-A-OPM 2.6.2](#)
- 7.8 [C-A-OPM 2.6.4](#)
- 7.9 [C-A-OPM 3.11](#)

8. Attachments

- 8.1 [C-A-OPM-ATT 2.6.3.a, "LOTO for Booster MMPS Checklist"](#).