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C-A OPERATIONS PROCEDURES MANUAL

16.4.7 Authorization to Run F&ES Magnets above Beam Setup Sheet Maximum Currents

(Collider Accelerator Support Group Procedure A.7.0)

Note: This document was formerly a C-A Group Procedure. The content of the group procedure was reviewed by the Technical Supervisor. All approvals and/or issue dates of the original group procedure are maintained for present use.

Hand Processed Changes

<u>HPC No.</u>	<u>Date</u>	<u>Page Nos.</u>	<u>Initials</u>
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Approved: \_\_\_\_\_ Signature on File \_\_\_\_\_  
Collider-Accelerator Department Chairman Date

F. Kobasiuk

Collider Accelerator Support Group  
Procedure A.7.0  
Original Issue Date: 08/23/04  
Revision 00

# FES PROCEDURES AND INSTRUCTIONS

DATE: August 23, 2004

ISSUED BY: F. Kobasiuk

SUBJECT: Authorization to Run F&ES Magnets above Beam Setup Sheet Maximum Currents

## 1. PURPOSE

- 1.1 To provide guidelines for the CAS Watch to permit an F&ES magnet to run at a higher current than indicated on the beam set-up sheet.

## 2. RESPONSIBILITY

- 2.1 The CAS Coordinator is responsible for implementing this procedure during CAD running periods.

## 3. PREREQUISITES

- 3.1 Inquire the Experimenter the reason for the request.

**CAUTION:**

The Experimenter's reasoning may indicate a potential equipment problem rather than a need for more current.

- 3.2 Receive approval for the change from the Beam Line Liaison Engineer.
  - 3.2.1 When possible, have the following system design information available to aid the L.E. in his decision.
    - Magnet voltage and current design limits
    - Determine if the magnet has a cooling system orifice
    - Power supply voltage and current limits
    - AC and DC cabling limits

**CAUTION:**

When a D.C. Transfer Switch is part of the system, check the DC cabling at both the P.S. and the output side from the Transfer Switch.

- Determine if the sub-station or AC disconnect switch services will accept the additional load.

## 4. PRECAUTIONS

None

## 5. **PROCEDURE**

- 5.1 When required, increase the power supply tap switch setting
- 5.2 Adjust the DC overload setting to the new limit.
- 5.3 When applicable, adjust the Instant-on Circuit setting.
- 5.4 If available, record the power supply AC and DC meter readings at the new operating parameter.
- 5.5 Update the maximum setpoint for the element on Dibbuk or request the MCR Operation Coordinator to update their program.
- 5.6 Record the change on the current beam set-up sheet.

## 6. **DOCUMENTATION**

- 6.1 CAS Work Control Log
- 6.2 CAS Coordinator's Summary
- 6.3 Recorded change on the active Beam Setup Sheet.

## 7. **REFERENCES**

- 7.1 F&ES Current Beam Set-up Book
- 7.2 Web based sub-station load Log  
Determine if the sub-station or AC disconnect switch service will accept the additional load.
- 7.3 CAS/ESG Shop Files
  - DCOL/Instant-On Circuit Setup
  - Power Supply Specifications
  - Magnet Specifications

## 8. **ATTACHMENTS**

None