THOMAS JEFFERSON NATIONAL ACCELERATOR FACILITY
12000 Jefferson Avenue
Newport News, VA 23606

HALL B PROCEDURE NO.:
B000000400 –P002 Rev - A

TITLE B000000400-P002 Hall B Solenoid Operations Power Up Checklists

BY: R. Fair DATE: 01-30-2017
Intended Checker and Approvers:
CHK: P. Ghoshal
1. APP: R. Rajput-Ghoshal

REV.	ECO#	DESCRIPTION	BY	CHK.	APP.	APP.	DATE
A		Updated list with 3 more checks under Section 8	R. Fair	P. Ghoshal	R. Rajput-Ghoshal		

SUMMARY OF CHANGES FROM PREVIOUS REVISION:

Approved: 8/15/2017; E-Sign ID : 348881; signed by: Ap. 1: R. Rajput-Ghoshal; C.: P. Ghoshal; D: T. Fuell

	BY (Initials)	Date
B000000400-P002 Hall B Solenoid Operations Power Up Checklists REV A		
Ensure that the following checklist has been completed:		
B000000901-P006 Hall B Check Lists for Cool Down of Cryogenic Systems		
Section 1, Initial List, Instrument Checks		
B000000400-P003 Hall B Solenoid Pre-Power-Up Instrument Checkout Procedure		
Magnet PLC Operational		
Low Voltage Chassis and cRIO DAQ Operational		
Fast DAQ cRIO Operational		
Magnet Coil Temperature Sensors Checked		
Thermal Shield Temperature Sensors Checked		
SST Temperature Sensors Checked		
Magnet Load Cells Checked		
Hall Sensors Checked		
EPICs Screens Operational		
Section 2, Initial List, Water-Cooled Leads		
B000000400-P007 Hall B Solenoid Pre-Power-Up Water-Cooled Leads Checkout Procedure		
Bolted Connections at Solenoid Service Tower End Checked		
Bolted Connections between 9ft leads and 39ft leads Checked		
Bolted Connections at Power Supply End Checked		
Water Connections at Solenoid Service Tower End Checked		
Water Connections between 9ft leads and 39ft leads Checked		
Water Connections at Power Supply End Checked		
Water Flow Rate Checked		
Electrical Isolation Box at Power Supply End Checked		
G10 electrical isolation box at connection between 9ft leads and 39ft leads Checked		
Section 3, Initial List, Vapor-Cooled Leads		
B000000400-P008 Hall B Solenoid Pre-Power-Up Vapor-Cooled Leads Checkout Procedure		
Vapor-Cooled Lead Flows calibrated and programmed		
Vapor-Cooled flag heaters On and set to temperature		
Vapor-cooled leads exhaust heaters On and Controls Calibrated		
Electrical Isolation Box at Solenoid Service Tower End Checked		
Section 4, Initial List, Magnet Power Supply		
B000000402- P001 Hall B Superconducting Magnets Pre-Power-Up Power Supply Internal Interlock Checklist		
EPICs Screens Operational		
Section 5, Initial List, Low Current Voltage Tap Check		
B000000400-P006 Solenoid Low Current Voltage Tap Check Procedure		
EPICs Screens Operational		
Check voltage tap test panel switches are in the MAGNET OPERATION position		
Ensure the voltage tap test panel switches are adminstratively locked		
Section 6, Initial List, Interlock Checks		
B000000400-P005 Hall B Solenoid Pre-Power-Up Interlock Checkout Procedure		
EPICs Screens Operational		
Section 7, Initial List, Quench Detector Checks		
B000000400-P004 Hall B Solenoid Pre-Power-Up Quench Detector Tuning		
EPICs Screens Operational		
Section 8, Environmental Checks		
Check that the Solenoid Magnet Ground cable is connected to the spaceframe		
Check that the Hi-Pot test to 750 V is complete (with PSU Ground resistor removed)		
Check that the PSU Ground resistor has been re-installed		
Check that there is no loose ferromagnetic material within the 5 Gauss boundary		
Check that pump trolleys, etc. have been either tied off or locked down so they cannot move		
Check that the Solenoid magnet has been roped off at the 5 Gauss boundary		
Check that all other relevant magnetic field boundaries have been marked		
Check that no cranes or manlifts are operational		
Ensure that the crane has its hook in its uppermost position		
Ensure that flashing beacons are operational		
Post appropriate signage at all entrances to the hall (including the truck ramp)		
Inform all personnel within the hall that power-up of the Solenoid magnet is imminent		
Power-Up of Solenoid Magnet authorized to start		