

- Machine Summaries:
 - **Mau**
 - Summary:

Updated 3/30/06	MONDAY 3/27	TUESDAY 3/28	Wed 3/29	THURSDAY 3/30	FRIDAY 3/31	SATURDAY 4/1	Sunday 4/2
Owls 0000 to 0800							
DAYS 0800 to 1600	NIF-PT 0700-noon Booster East Gallery gear outage move to generators Tunnel on 1st Towers on next Gallery on next 0812-1130 FDR 75 (guiled power no impact on shutdown) CHL/CDF/Feynman still on Feeder 47 (industrial)	← 0815-1130 MIS house power outage	NIF-PT 0815-1130 FDR 96/97 (guiled power no impact on shutdown) Tey rd closures 1 big at a time A1,A2,A3,H,F3	NIF-PT Booster east gallery on generators 0815-1130 FDR82/65 (guiled power no impact on shutdown) CHL,CDF, Feynman moved back to feeder 49 (no power outage)	→ 0700-noon Bgr outage for Booster East gallery tunnel, East towers to come off generators	0700-1600 70 (experimental are) 13.8 kcr and 48- volt maintance	
EVES 1600 to 2400							

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Updated 3/24/06	MONDAY 4/3/2006	TUESDAY 4/4/2006	Wed 4/5/2006	THURSDAY 4/6/2006	FRIDAY 4/7/2006	SATURDAY 4/8/2006	Sunday 4/2/2007
Owls 0000 to 0800							
DAYS 0800 to 1600	0700-0730 Master sub power outage (affects whole site except Village, Main injector, 5000 Feeder46a M112a,12b,13)	NIF-PT ←		NIF-PT Master substation Moved to kautz Ed substation (for next 3 weeks) Meson area controls down	NIF-PT	NIF-PT	0700-1600 Feeder 43 power outage (affects Swachyard, F1,F2,F3,Q2 Manholes, Transfer gallery, and transfer hall)
EVES 1600 to 2400							

□

Updated 3/24/06	MONDAY 4-10-2006	TUESDAY 4-11-2006	Wed 4-12-2006	THURSDAY 4-13-2006	FRIDAY 4-14-2006	SATURDAY 4-15-2006	Sunday 4-16-2006
Owls 0000 to 0800							
DAYS 0800 to 1600	NIF-PT ←	Save restore and SDA outage. (Will have controls but no ability to use save restore and SDA)	NIF-PT Feeder 23 teatron guiled power maintance(affects no lights or power outlets) Master Sub on Kautz Ed substation	NIF-PT 0815-1130 EdR Pwy outage, Mno some local controls work		0700-1700 Feeder 44 power outage. In line specific and will affect Mini boone, Minos, education center) (need to worry about minos comp pump)	→
EVES 1600 to 2400							

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April 2006 updated 3/24/06 (Draft)						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
					April 1 CR 13.8 and 400 maintenance 8hr pax outage	2
3 0700-0730 Master sub Exp. outage Linac On	4 NTF	5	6 NTF Meson area controls down	7 NTF	8 FDR 43 BY transfer gallery PWR outage 8 hrs (power not brought to booster)	9
10 NTF	11 Sue restore/ida outage 14 hrs(will have controls)	12 NTF Master substation Moved to Kautz Rd	13 NTF EHR AM & Controls FDR 23 Tev Pulsed Pwr	14	15- Feeder 44 pax outage Affects main beamline Meson Education center, (worry about Meson pump?)	16
17 NTF FDR 23 HARMONIC FILTER	18	19 NTF	20 NTF 94/95 FDR 23	21	22 -FDR 40 Meson gallery(MCR PWR also) 8 hrs	23
24 NTF 0700-0730 master sub pax outage, move master sub back to normal config	25 Java/Tag shutdown 8hrs Feeder 48 test if down 8 hrs	26 NTF FDR 38 CRH OFF 8 hrs Also LBE compressor format off 32 hrs	27 NTF CD/DO on feeder 45 Feeder 47/69 1hr switch outage, (1 hr) FOC on generators Affects Industrial complex(actually B1- 2 transformer & B1- 1) 8hr	28 IBL former oil fill Y-BL off 24 hrs	29 Booster PWR outage 2 hrs for whole booster East gallery 4 hrs am West gallery 4 hrs pm	30
AD house pax outage 4 hrs am		TEV rd closures 1 Mtg at a time AL,A2, A3, F4, F3 this week	ML1 down oil fill 24 hrs			

May 2006 updated 3/17/06 (Draft)						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
May 1 NTF 0700-0730 Kautz Rd sub outage move to Master sub	2 Start Killing zehra muscle (6 to ~ 15 days)	3 NTF	4 NTF Kautz Rd Sub on Master sub (depends on Batista)	5	6 MP9, MW9, MSB, MDW, MDE, SITE 40/LOWRAD WASTE, MCRO	7
8 NTF Feeder 46 a down 5 days AD will be on generators all week MEANS ANOTHER PWR OUTAGE	9 Fix cable connection at IO on feeder 46a	10 NTF TEV rd closures 1 Mtg at a time AL,A2, A3, F4, F3 this week	11 NTF AD oil switch replacement 46a down	12 Power up feeder 46a AD off generators MEANS ANOTHER PWR OUTAGE	13 Feeder 45 (Tev conversion PWR) outage 10 hrs	14
15 NTF KR HARMONIC FILTER	16 KR HARMONIC FILTER	17 NTF MDE	18 NTF MDW 5.6, 10, 14 Kautz Rd Sub on Master sub	19 NTF	20 Feeder 44 WILSON HALL (10 hrs)	21
22 NTF MS1 0700-0730 Kautz Rd Sub Exp outage to PWR (to normal)	23 MS2/MS3	24 NTF MI and Booster start up MS4	25 NTF Tev Cold	26 Pbar PS start up	27	28
29 (lab holiday)	30	31 NTF	June 1 NTF Booster, MI Pbar start up	2	3	4 END OF Shutdown

Requests:

Linac

LINAC Shutdown Summary

Finished Work

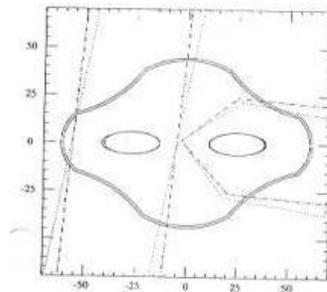
- ✓ Cleaned L.E. LINAC Modulators & Rectifiers (LRF1-LRF5)
- ✓ Replace water fittings in Klystron Modulator De-Q'ing circuit
- ✓ Replaced Collimator between L.E. LINAC Tanks 1 & 2
- ✓ L.E. LINAC Water Maintenance
- ✓ Modified Chopper & Moved Quad for future MuCool operations
- ✓ Completed McCool Alignment
- ✓ Annual Pre-Acc Safety Trip Test
- ✓ Cleaned Filters on 8 Ion Pump PS's
- ✓ 45°/90° Magnet PS Maintenance
- ✓ LLLRF 9" Line Calibration on LRF5
- ✓ Driver Characterization on LRF5

This Week

- Continue Preventative Maintenance on H.E. LINAC Klystron Systems
- Debugging LRF7 oscillations
- Modulator Characterization on LRF5
- I- Anode Bulk Supply Upgrade
- NTF Patient Treatment (M,W,&Th)

Next Week

- Continue Preventative maintenance on H.E. LINAC Klystron Systems
- LLLRF 9" Line Calibration on LRF4
- Driver Characterization on LRF4
- I- Anode Bulk Supply Upgrade
- NTF Patient Treatment (Tu,Th,&F)



Booster

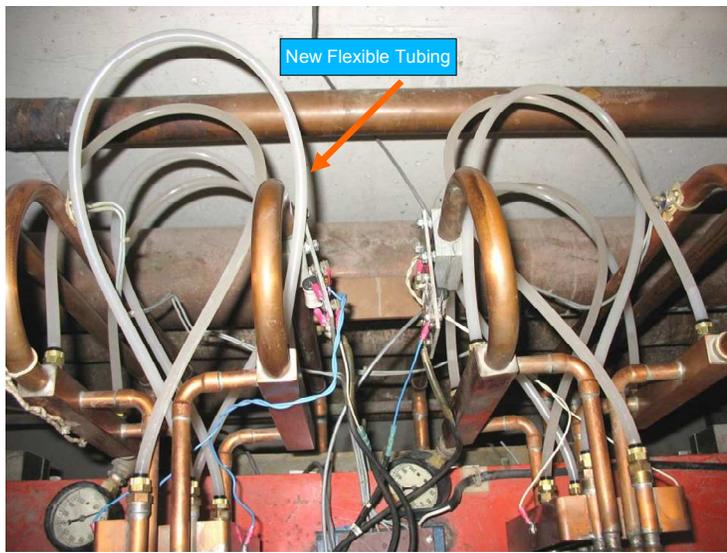
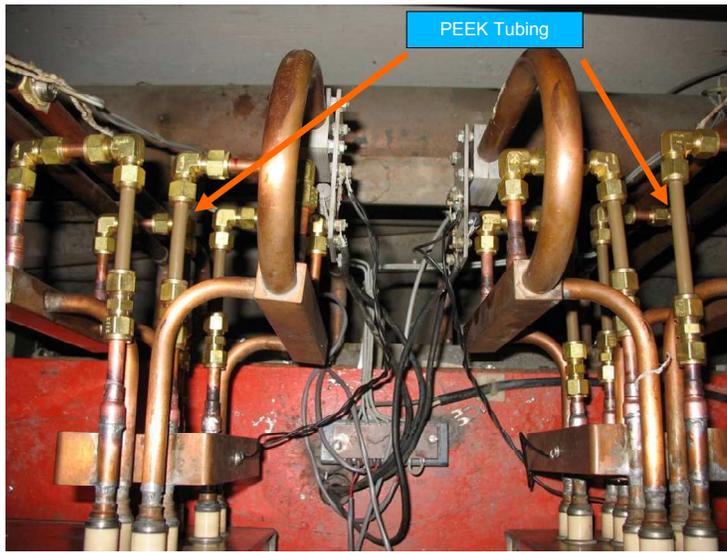
Summary:

- [Booster Shutdown Work - Week 5](#)
 - Q805/Q806 and Septum Alignment continues
 - MI-8 beam stop aligned
 - Downstream MI8 dump line assembly
 - Kicker Beam Tube installed
 - LCW pipe for corrector upgrade nearly done
 - ORBMP magnet/Girder work continues
 - ORBMP Power Supply Conditioning
 - Tunnel Sump Line installation in progress

[Booster Shutdown Work - Week 5](#)

- **Booster East 13.8KV switch gear installed**
- **GMPS #3 Transformer replaced**
- Candy Cane PEEK and Tubing upgrade on gradient magnets
- RF maintenance continues
- 400 MeV Gallery work continues
- Booster West MI8 Tunnel coring completed
- **MI-8 conduit arrived and is being installed!**







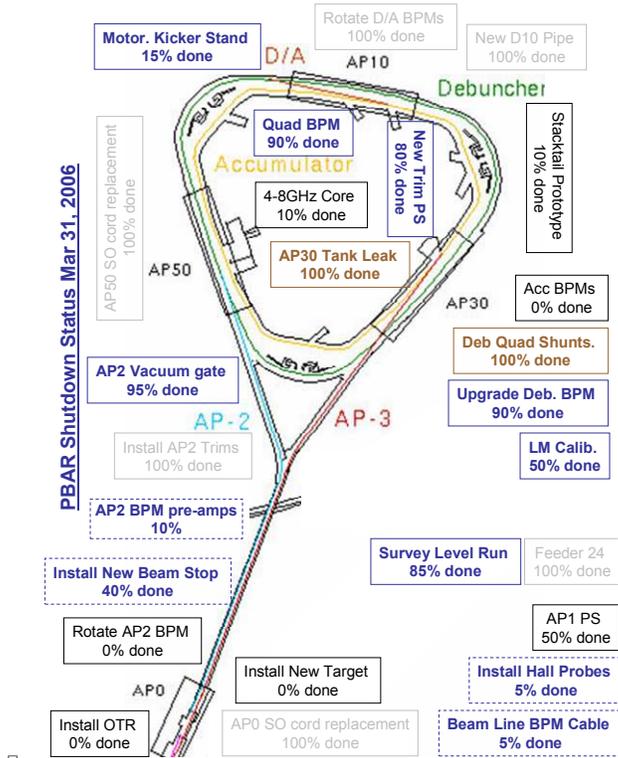
Coring at Q805/806
For Septum Cables (conduits)



13.8 kV work/GMPS #3 Transformer
Replaced

Pbar

Pbar



Main Injector

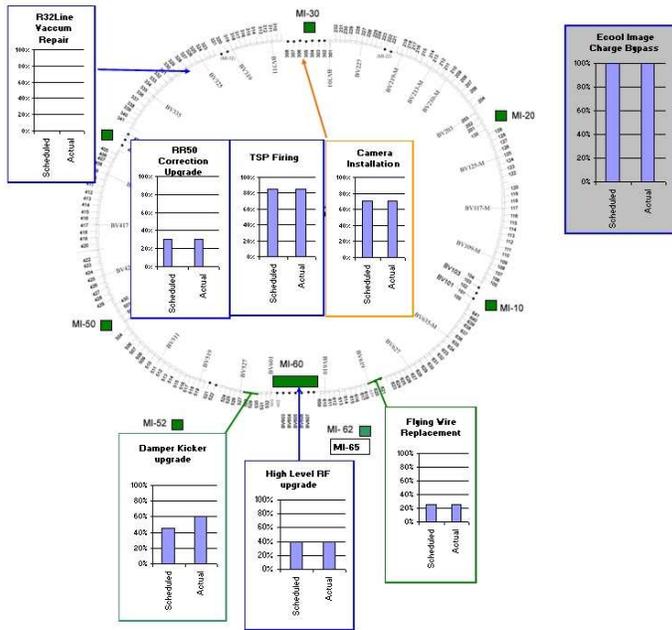
MI Shutdown report

D. Capista 3/31/06

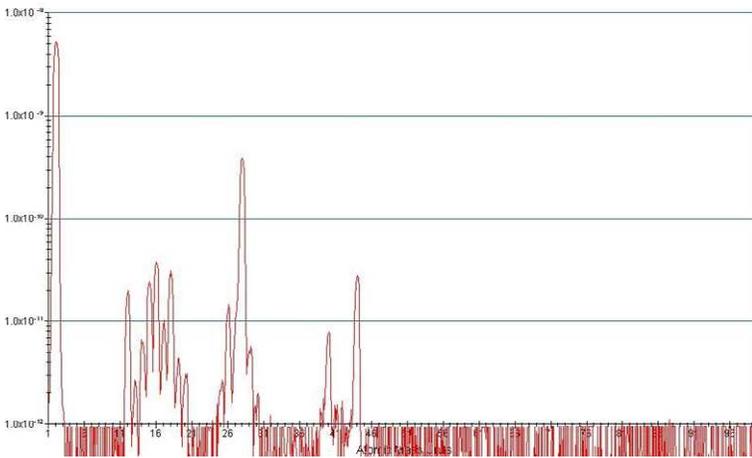
- Continued installation of the new MI8 line multiwires .
- Continued installation of MI8 collimator.
- Continued installation of a large aperture quad at 222.
- Continued installation of large aperture quad at 608.
- Continued installation of large aperture quad at 620.
- Began installation of large aperture quad at 101
- Both quad locations - have had problems with o-ring vacuum seals.



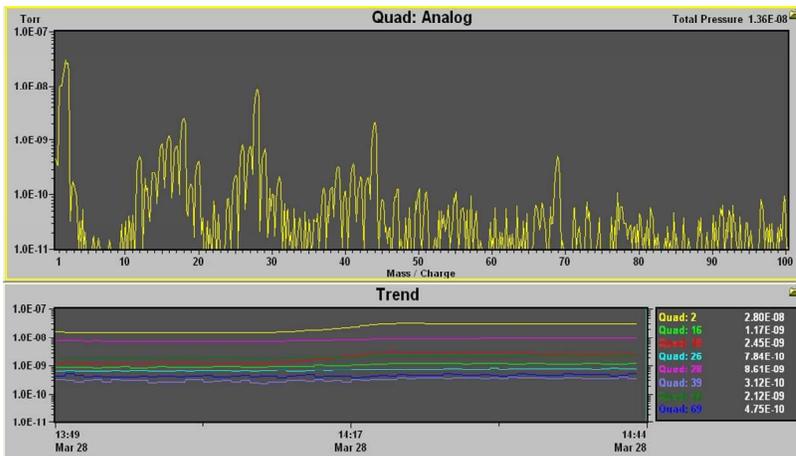
□ Quad 620



Flying Wire Certification Scan

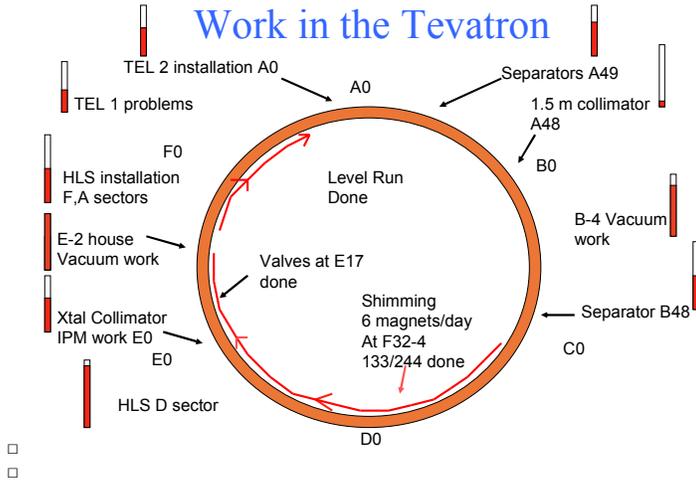


Dampner kicker #1



Tevatron

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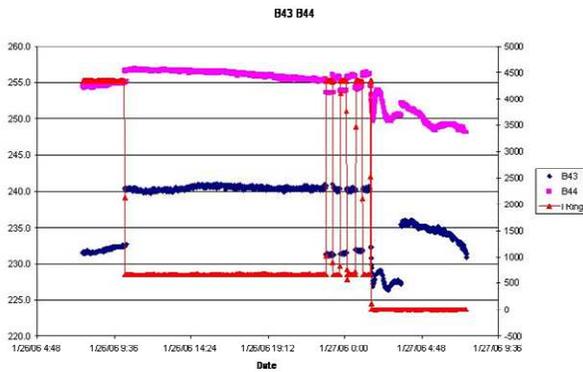


Vacuum work

- Complete F-4, A-3, E-2
- Underway at B-4 change stands B43-1 B44-1
Should be certified early next week
- Start on D-1 next week un roll D16-1 by 12 mr
- IPM stand to shop for re work
- Bake of Xtal Col done, E-17 Schottkys ended cooling down
- TEL 2 installation on going
- TEL 1 at IB-2 bad bellows have been cut out and replacement underway

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B43 B44 and I Ring



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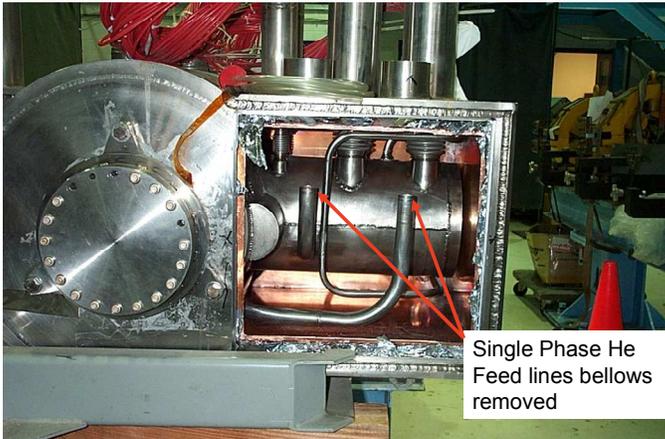
- o Plot show as we ramp the Tevatron, we can see the quads move. We can try to chagne the stands to see if it helps.

to change the stands to see if it helps.

Stand Change at B43-1



TEL 1 at IB2



Jobs not yet started

- Deep rod monuments
- Un Roll D16-1
- Re align low beta quads at B0
- As found A and E sectors with laser tracker
- A 17 separator
- TEL 1 installation
- IPM installation

SY120

- Summary:

- Continue to work on low momentum config for MTest

NuMI

NuMI - Shutdown – Week 5

Construction Shaft Drip Pan Removed
Drain And Calcite Cleaning Completed at Absorber & Muon Alcoves
Starting in Decay Pipe Passageway
Fall Protection in Pre-Target Near Complete
Aluminum Angle Installed at Edge of Emergency Passageway Wall

Job Planning in Process for Target Hall Desiccant Unit Installation
Initiating Other Actions to Reduce Humidity in Target Hall

Level Runs Starting Next Week
Target Inspection Next Week

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- **MiniBooNE**

Spring Shutdown 2006 MiniBooNE



- Week of April 17:
 - Test Horn3.
 - LCW will be available sometime during week of April 10, bet better to fix adate than scramble.
 - Need enclosure interlocked.
- Week of May 1:
 - Begin alignment work.
 - Begin RAW system work.

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CDF

- Summary:
 - Finsihed cabling hardware event filter.
 - Some racks have power problems.
 - Cleaning alochol bublers for gas systems
 - 4 of 12 HVPS. 2 days behind schedule.
- Requests:
 -

DO

Summary of Fifth Week Activities

- Layer 0
 - Transport North Inner H disk to Si Det for mount repair
 - Begin testing HV distribution for Layer 0 channels
 - Mount tables, rails, and optical equipment in gaps in preparation for installing Layer 0 mounts on SMT support structure
 - Begin installation of Layer 0 mounts on SMT support structure
- Level 1 Calorimeter Trigger
 - Continue connecting BLS cables to patch panels and testing
 - Continue verifying L1Cal Trigger installation
- Level 1 Central Track Trigger
 - Continue cabling DFEA2s and begin verification of cabling
- Detector Maintenance
 - Begin reassembling individual luminosity monitor counters
 - Continue calorimeter individual channel recovery
 - Upgrades of L1 Muon power supplies in progress
 - Continue muon PDT mods to accommodate latency shift
- Power outage at DZero on Saturday April 1 from 0700 to 1600

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Layer 0 Installation Milestones

ID	TASK NAME	Actual	Current Forecast	Pre-Shutdown Forecast	Milestone Dates
2	Beginning of RunIb Tevatron Shutdown	2/23/06		2/27/06	2/27/06
28	Detector Open, Ready for Access	3/1/06		3/2/06	3/07/06
34	RunIIa Be Beam Pipe Disconnected	3/3/06		3/7/06	3/9/06
47	H Disks Removed	3/15/06		3/17/06	3/23/06
56	RunIIa Be Beam Pipe Removed	3/21/06		3/27/06	3/31/06
75	Layer 0 Tooling and Mounts Ready		4/7/06	4/10/06	4/17/06
79	Layer 0 Installed		4/11/06	4/12/06	4/19/06
91	RunIIb Be Pipe Connected, Layer 0 Cabled		4/25/06	4/26/06	5/03/06
94	Inner H Disks Re-Installed		5/1/06	5/2/06	5/9/06
99	Silicon Cold and Ready for Technical Commissioning		5/4/06	5/5/06	5/12/06
103	Complete Technical Commissioning of Silicon		5/10/06	5/11/06	5/18/06
118	Detector Closed for Tevatron Resumption		6/01/06	6/02/06	6/4/06

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○ Alignment

Alignment Schedule for March 31 2006

■ Tevatron

- Completed 96% Unrolls
- Completed Elevation run 92% (Drops still needed)
- Completed B48 Separators
- Scheduled Unrolls (Should complete today)
- Scheduled Deep Rod installation.

■ Main Injector

- Completed Alignment MI 608
- Completed Alignment MI 620
- Completed Alignment MI 101
- Schedule Texas Multi-Wires
- Schedule MI 402

○

Alignment Schedule for March 31 2006

■ 8Gev

- Scheduled Continue " The installation of the MI-8 beam dump will require alignment. Several kickers will be installed, one septa magnet, 1 BPM, 2 Toroids, beam pipe, 1 quad will be moved and two multiwires."

□ P-Bar

- Completed 95% Elevation runs (One Drop needed)

■ 400Mev

- Completed Additional OrBump Magnet Alignment on Girder IB2

■ Recycler

- Completed 180 Deg. Magnet alignment and beam pipe.

○

Alignment Schedule for March 31 2006

■ MiniBooNe

- Not Scheduled

■ Numi

- Schedule Level run between MI-60 to NuMI SR3 (Tgt Hall) aprox 1500 ft.

■ Linac

- Completed

■ MIPP

- Completed

○

Alignment Schedule for March 31 2006

■ Add On's

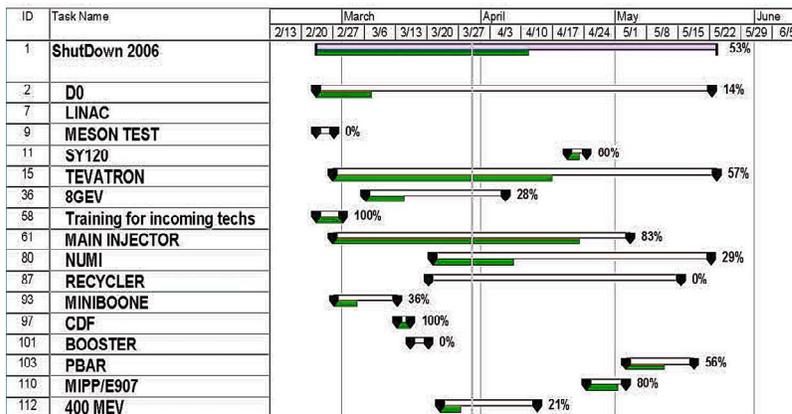
■ Tevatron

- Completed as found Separators B49
- Scheduled Tevatron Unrolls (Today)

■ 400Mev

- Additional OrBump Magnet Alignment on Girder IB2

Progress as of March 31 2006



○ Mechanical - Booster 95 LCW Presentation

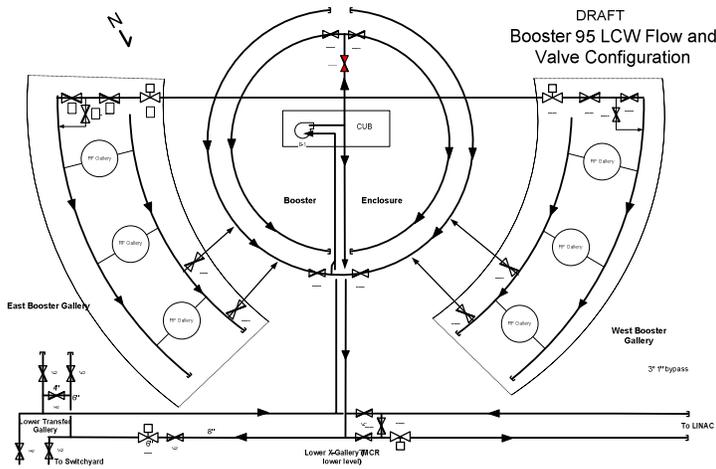
Booster 95°F LCW System
Safeguards/Improvements
A Progress Report

- Current Status
- Review
- Valve Schematic
- Action Plan

Current Status

- Valves required for flow have been verified open
- A temporary stand down on all main header valves is in place.
- LCW System Operational, half capacity
 - Booster Flow, Enclosure, Gallery, restricted
 - Switchyard and LINAC normal configuration
 - Temporary Configuration Control procedure in place, Lock box
 - 1st Draft Call and Approval List

DRAFT



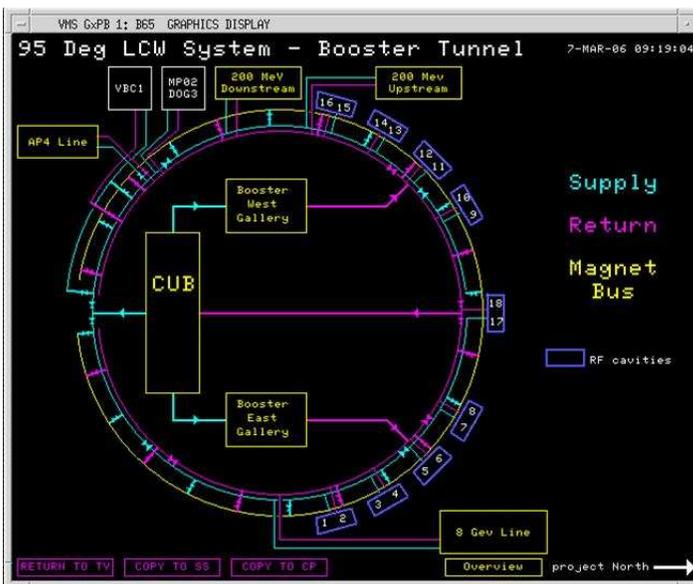
Ball
Revision Date: 3/22/06

Short Term

- Configuration Control/LOTO for normal shutdowns
- Identify and operation control all main header valves.
- Procedure for emergency situations

Mid Term

- Water relief valves upstairs & downstairs
- Surge tanks
- Review & Update console graphic page ACNET Console, Improved instrumentation pressure/flow
- LCW System Configuration training (operators & water techs)
- Rookie books



Long Term

- Piping System Reconfiguration
- Add bypass in CUB (FESS) or downstairs or gallery (AD)
- Valve Position Monitors/Indicator
- Actuate critical valves for control
- Very expensive. Cost versus value, time labor

ES&H

ES&H

■ Safety System Upgrades

- Data Acquisition System 95% Complete
 - 16 of 17 Linux Ethernet Port Replicator (LEPR) chassis installed
- Booster 50% Complete
 - [Remove RDF Area Interlocks - Complete](#)
 - Booster Dump Move Configuration Changes
 - Completing Documentation to submit for Approval to Operate
- Main Injector 15% Complete
 - Lower Level Controlled Access Displays Replaced
 - Main Injector Coasting Beam System changes
 - Lam10 Critical Device Interface Installation

ES&H

■ Safety System Upgrades

- P-Bar Source 80% Complete
 - [Radiation Monitor Card Replacement - Complete](#)
 - Safety System Power Supply Replacement
 - Interlock New BSC700 Beam Stop
- Tevatron 50% Complete
 - Moving location of both Tevatron Coasting Beam Gate Valves
 - F-Sector Radiation Monitor Card Replacement
- MT6 Section 1 & 2 50% Complete
 - Enclosure Interlock System Upgrade
- Safety System Testing 0% Complete
 - All areas need to be re-tested before startup.

ES&H

- Radiation Exposure
 - ~4.4 R total dose for the first 4 weeks of the shutdown.
 - Reminder to get weekly dose cards or electronic dose recording turned in on Monday's.
- Radon Detectors
- No Injuries or Incidences report.

○ Roger reminds us to keep Safety in mind.

○ Cryo

AD/Cryogenics Dept Shutdown 2006 Status Report 3/31/2006 (Makara/Olesen)

Cryo Operations:

- Tevatron at LN2 temperature and LN2 usage is stable with vendor deliveries.

Helium losses are slightly up at 15 kscf/day (1/2 of normal during Tev operations).

- A1, A3, B4, and E2 are at room temperature and isolated with LOTO.

F4 is also at room temperature, has been reconnected by Cryo, and is currently under normal helium flow with anticipation of Division sign-off and cooldown to LN2 temperature soon; this house can be cooled down to LN2 temperature without the TEL-1 installed.

E2 was finished by MSD and Cryo has started reconnection procedure.

B4 is nearly completed by MSD and Cryo will start reconnection procedure after their approval.

A3 is also almost completed by MSD; Cryo needs to epoxy past noted helium leaks on power leads and spool piece conning tower leaks (5 out of 8) still need addressing.

D1 warmup to room temperature will start today and should be ready for MSD by Monday night.

- Pbar D60 Debuncher vacuum work has been completed by Pbar Dept, thus Cryo personnel will restore helium/nitrogen connections and cool down tanks to LN2 temperature after Division sign-off.
- ACNET application programs relating to FRIG operations are being tested on Linux consoles.
- MCR monitoring cryo operations.

CHL Maintenance:

- General facility maintenance is in progress.
- CHL Helium Compr "A" cooling tower installation has been completed with painting in progress. Some minor controls/electrical/instrumentation work is left.
- NRL maintenance has been completed. The IR Booster Compressor was overhauled and the TSI Compressor Niagara Intercooler heat exchanger bundles were reinstalled. The IR Booster Compressor is being started today for plant purification. Estimate return of plant back to service is after the April 3 MSS power outage.
- Helium Coldbox-2 controls upgrade is in progress.

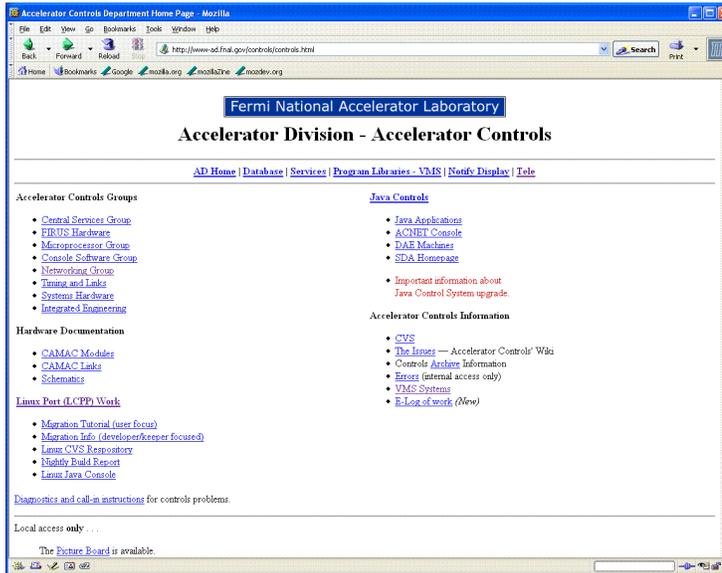
FRIG Maintenance:

- Ring-wide overhauls of wet expanders in progress with 17/24 completed.
- Five IHI cold compressors that were removed for inspection have been overhauled.
- Various FRIG bldg vacuum maintenance and instrumentation repairs (e.g. lost charge on VPTs) are in progress, as well as support work on houses at room temperature and other equipment as things fail even during the shutdown period.
- Various Mycom compressor maintenance: leak hunting and general repairs, F0#1 compressor replacement was completed, F0#3 motor starter replacement in progress.
- All 4 Kautzky test stands are complete 4 mini kautzky change manifolds completed. There are presently 250 poppets in inspection. Kautzky change outs will begin next week.
- TEL-2 LN2 and LHe jumper U-tubes has been installed in the bypass. Four flex U-tubes for TEL-2 installation are complete, to be used for TEL-2 final connection.

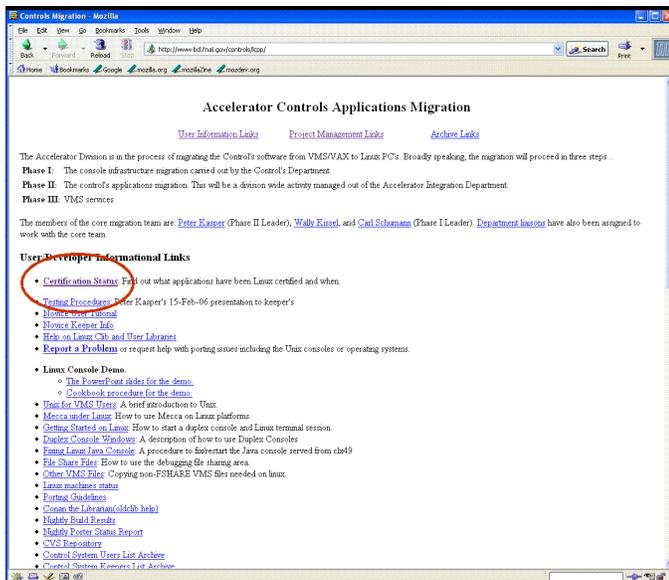
- **Other - Linux Migration**



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List applications certified between Mar 24 2006 00:00 and Mar 30 2006 24:00

or list Pending Certification Requests

Application	Description	Certified on	Linux Usage
113	pa1175 - D87	check power supplies status	Mar 30 2006 16:20 0 hrs
112	pa1159	Measures Booster Bunch Length	Mar 30 2006 16:19 0 hrs
111	pa2000 - C45	Read a single bpm from profile frames	Mar 30 2006 16:19 0 hrs
110	pa0655 - D90	Tevatron Quench Log Display Program	Mar 30 2006 16:19 0 hrs
109	pa1022	Electron Cooling losses plot	Mar 30 2006 16:18 0 hrs
108	pa2023 - R33	ReCycler Schottky Monitor	Mar 30 2006 16:18 0 hrs
107	pa1610 - P113	GFS Status	Mar 29 2006 10:47 0 hrs
106	pa0798 - H48	gun status test (for B0 and D0 new CPM)	Mar 29 2006 10:46 0 hrs
105	pa1132	CDF downtime logger plot	Mar 29 2006 10:43 0 hrs
104	pa1089	ODDMOD Plot	Mar 29 2006 10:43 0 hrs
103	pa2102 - B122	Calcs Booster Bucket area	Mar 29 2006 10:43 0 hrs
102	pa1921 - D54	Setting Server Browset/Peeker	Mar 29 2006 10:43 0 hrs
101	pa1008 - D80+	Dump dense database information program	Mar 29 2006 09:13 1356.5 hrs
100	pa1179	Clock logger (runs on cns1 in slot 7)	Mar 28 2006 10:30 0 hrs
99	pa1569 - F25	Refrig Temperature and FSIA Plot Program	Mar 28 2006 10:28 0 hrs
98	pa1507 - F75	Refrigerator mass flow calculations	Mar 28 2006 10:28 0 hrs
97	pa1486 - F16	This program starts up the Tevatron cryo temperature display	Mar 28 2006 10:28 0 hrs
96	pa1298 - F34	Cryogenic finite state machine viewer	Mar 28 2006 10:28 70.1 hrs
95	pa1611 - F26	TRANSFORM CONSTANT	Mar 28 2006 10:27 0 hrs
94	pa1590 - F27	Kaonstly leak bit decode and display	Mar 28 2006 10:27 0 hrs
93	pa1659 - F74	CHL Flow Calculations	Mar 27 2006 10:35 42.2 hrs
92	pa0095 - D37	Curve Fit II program which fits data to eqns or polynomials	Mar 27 2006 10:33 0.2 hrs
91	pa0213 - D64	TEST PROGRAM	Mar 27 2006 10:31 0 hrs
90	pa1948 - I36	Main Injector AD8116 Max Switch	Mar 27 2006 10:30 2.8 hrs
89	pa1881 - S69	This application launches ACL scripts	Mar 27 2006 10:28 2 hrs

Pending Certification Requests

Application	Description	Requested on	Sensitivity
16	pa0758 - D43	Lumberjack Logger List Control	Mar 21 2006 12:24 Very Sensitive
15	pa1516 - D44	Lumberjack plotter	Mar 21 2006 09:36 Moderate
14	pa1949 - P189	PEAR AD8116 MUX SWITCHES CONTROL	Mar 15 2006 14:06 Moderate
13	pa0503 - T14	Save and display temperature and humidity from the Gannon detector	Mar 28 2006 12:20 Insensitive
12	pa1040 - D153	This is a program to test window_manager and related routines	Mar 24 2006 14:43 Insensitive
11	pa1617 - D60	Display Object Locks	Mar 24 2006 10:59 Insensitive
10	pa1548 - D57	GAS module alarm download file display/edit	Mar 24 2006 10:57 Insensitive
9	pa1710 - D36	This program allows the user to create and edit generic structur	Mar 24 2006 10:31 Insensitive
8	pa1002 - D110	test wnlb routines	Mar 24 2006 09:21 Insensitive
7	pa1971 - D134	to display and edit device access list	Mar 15 2006 14:09 Insensitive
6	pa1151	Spectrum Analyzer Emulation	Mar 15 2006 14:08 Insensitive
5	pa0020	Data Pool Manager Peek SA	Mar 15 2006 14:08 Insensitive
4	pa0017	SAVE/RESTORE PROGRESS DIAGNOSTICS DISPLAY	Mar 15 2006 14:08 Insensitive
3	pa1446 - D131	Diagnostic in support of tcp/ip data acquisition	Mar 15 2006 14:08 Insensitive
2	pa0704 - D35	FLD's cache table peek	Mar 15 2006 14:07 Insensitive
1	pa0003 - D3	Data Pool Manager Usage Peeker	Mar 15 2006 14:07 Insensitive