

Tevatron Power Outage Response

Reviewed by Todd Johnson

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Please notify the Tevatron department and the Operations Specialist in the event of a glitch or power outage. If at any point in this procedure something does not work, call the appropriate personnel for assistance.

1. Contact personnel as necessary:

- Department Head - Ron Moore
- Deputy Department Head - Jerry Annala
- Mechanical Support - Dave Augustine
- Vacuum - Scott McCormick

2. CRYOGENICS: *If any glitch or outage affects cryo, see the following:*

- a. **CONTACT:** the Cryo Coordinator as soon as possible for guidance. Consult with CHL.
- b. **SEE ALSO:** The *Cryogenics Power Outage Response* procedure and associated cryo department documents included in this book.

3. LCW Pumps: If the power was glitched, there is a possibility *some* of the Tevatron LCW pumps are still on. With some pumps on and others off, as well as no control system to provide status, the LCW pumps could be cavitating and trying to rip pipes off the wall.

- a. **The Crew Chief should send a team around the Tevatron to verify that pumps are on and not cavitating.**
- b. If Tev LCW needs to be turned off, the A0 Photoinjector contacts (Jamie Santucci) need to be notified immediately. See *Response for Non-Accelerator Experiments*.

4. BEFORE power returns:

- a. **TeV Sump Pumps:** See the *TeV Sump Pits in a Power Outage* write-up.

5. As soon as power is restored and controls return:

- a. **VACUUM:** Recover vacuum. Start pumps up as needed. Consult with vacuum technicians. *Be aware that F0 vacuum comes through MIVAC.*
- b. **WATER:** Make sure that LCW systems are up and running ok. Check pressure profile to be sure we are not cavitating any pumps.
- c. **LINKS and NODES:** Verify the link is up on D20 and that TeV nodes are responding to node poll.
- d. **RESTORES:** Do a complete restore any differences for all TeV crates. *Be aware that various Tev components live on the MI CAMAC link.*
Do a C49 reactivate and a C50 restore for correctors.

6. When water systems are recovered and stable:

- a. **POWER SUPPLIES:** Turn on the power supplies.

- b. **RF SYSTEMS:** Recover the RF in consultation with John Reid.
7. **When all systems are stable:**
- c. **VALIDATE ALARMS!!** Make sure all devices are being monitored.
 - d. Make sure all systems are on and running nominally.
 - e. Try beam!

NOTES: Please use this area to note any problems encountered during recovery.