RICH FED Error Recovery Procedure

In the event of the appearance of FED errors in the RICH DAQ, the RICH expert has essentially one course of intervention to try to recover the faulty FED's, and that is to cycle the power to the RICH FED crates. This can be achieved in the following manner:

1) Log into hb−vme37 under the hb−rich account.
2) Change directories to /Oldhome/hb−rich/feds/full/
3) Execute the program h_fan2.exe
4) You will see an information screen – just hit return once more.
5) You now have a prompt "Command: " – enter "p" (without the quotes) and hit the return key.

```
 17-Feb-2000 13:53:14.12  Check: 63
+---------------------------------+-----+-----+-----+-----+
| ID TYPE NAME    COMMENT         |Power|Error| Fan |  T  |
+---------------------------------+-----+-----+-----+-----+
|  1.NIM  FED_01  FED_crate_#01L  |  +  |  -  |  +  | +31 |
|  2.NIM  FED_02  FED_crate_#02L  |  +  |  -  |  +  | +35 |
|  3.NIM  FED_03  FED_crate_#03L  |  +  |  -  |  +  | +34 |
|  4.NIM  FED_04  FED_crate_#04L  |  +  |  -  |  +  | +34 |
|  5.NIM  FED_05  FED_crate_#05L  |  +  |  -  |  +  | +35 |
|  6.NIM  FED_06  FED_crate_#06L  |  +  |  -  |  +  | +31 |
|  7.NIM  FED_07  FED_crate_#07L  |  +  |  -  |  +  | +37 |
|  8.NIM  FED_08  FED_crate_#08U  |  +  |  -  |  +  | +40 |
|  9.NIM  FED_09  FED_crate_#09U  |  +  |  -  |  +  | +38 |
| 10.NIM  FED_10  FED_crate_#10U  |  +  |  -  |  +  | +39 |
| 11.NIM  FED_11  FED_crate_#11U  |  +  |  -  |  +  | +40 |
| 12.NIM  FED_12  FED_crate_#12U  |  +  |  -  |  +  | +41 |
| 13.NIM  FED_13  FED_crate_#13U  |  +  |  -  |  +  | +41 |
| 14.NIM  FED_14  FED_crate_#14U  |  +  |  -  |  +  | +40 |
+---------------------------------+-----+-----+-----+-----+
 Crates: 14, Errors: 0, PowerOFF: 0  CPU-Time: 0 sec
 17-Feb-2000 13:53:15.24


 Command: █
```

1) You will now see a table−format information screen in your xterm. When the power is on for a particular crate, the Power column entry for that crate will have a "+", and when the power is off, this column entry will be "OFF". To turn off the power to all crates (which I would recommend), type "off fed", and you will see a confirmation question. Enter "yes" to continue, and then hit the return key 14 times (once for each of the 14 crates), and wait until the display has updated to show "OFF" for all crates.

```
 17-Feb-2000 13:54:32.69  Check: 70
+-------------------------------+-----+-----+-----+-----+
| ID TYPE NAME    COMMENT       |Power|Error| Fan |  T  |
+-------------------------------+-----+-----+-----+-----+
|  1.NIM  FED_01  FED_crate_#01L | OFF |  -  |  +  | +31 |
|  2.NIM  FED_02  FED_crate_#02L | OFF |  -  |  +  | +35 |
|  3.NIM  FED_03  FED_crate_#03L | OFF |  -  |  +  | +34 |
|  4.NIM  FED_04  FED_crate_#04L | OFF |  -  |  +  | +34 |
|  5.NIM  FED_05  FED_crate_#05L | OFF |  -  |  +  | +35 |
|  6.NIM  FED_06  FED_crate_#06L | OFF |  -  |  +  | +31 |
|  7.NIM  FED_07  FED_crate_#07L | OFF |  -  |  +  | +37 |
|  8.NIM  FED_08  FED_crate_#08U | OFF |  -  |  +  | +40 |
|  9.NIM  FED_09  FED_crate_#09U | OFF |  -  |  +  | +38 |
| 10.NIM  FED_10  FED_crate_#10U | OFF |  -  |  +  | +39 |
| 11.NIM  FED_11  FED_crate_#11U | OFF |  -  |  +  | +39 |
| 12.NIM  FED_12  FED_crate_#12U | OFF |  -  |  +  | +41 |
| 13.NIM  FED_13  FED_crate_#13U | OFF |  -  |  +  | +40 |
| 14.NIM  FED_14  FED_crate_#14U | OFF |  -  |  +  | +40 |
+-------------------------------+-----+-----+-----+-----+
 Crates: 14, Errors: 0, PowerOFF: 14  CPU-Time: 0 sec
 17-Feb-2000 13:54:33.81


 Command:
```

1) To turn on the power, enter "on fed", and again enter "yes" to the confirmation question, and follow this by hitting the return key 14 times.
2) Wait until the Power column has all entries filled with "+", and then you are finished. Enter q to exit the program, and check to see if this has cured the problem. If not, inform Kendall Reeves at x3148.