Cluster Emergency Documentation

Powering Down the Cluster
Shutting down the system is only really necessary for major system updates (such as kernel patches) or when there is an extended power outage (over 15 minutes). However, a certain order of shutdown is preferred, otherwise the CE/SE will hang, and could potentially get corrupted. The ideal method is only possible to perform locally, and is described below.

From the CE, shut down the compute nodes, then the SE, then the CE itself:
$ cluster-fork /sbin/init 0
$ ssh dev-0-0
      $ /sbin/init 0
$ /sbin/init 0

Now, use the KVM switch to move to nas0. From there, ssh into nas1, shut it down, and then shut down nas0:
$ ssh nas-0-1
      $ /sbin/init 0
$ /sbin/init 0

Note: if you have to shut down the cluster remotely, do <u>not</u> shut down the CE. Instead, after shutting down the SE, ssh into the nas's and shut them down first. Finally, shut down the CE.

Powering Up the Cluster
At this point, you likely wish to turn everything back on. This can only be done manually. To power back up, you must follow this order:

1. Turn on the nas's, and using the KVM switch to monitor one of them, verify they boot ok. This will take a few minutes, but is necessary so that they mount correctly onto the CE.
2. Now, turn on the SE and CE together, and verify they boot correctly. Log into the CE as root and verify the nas0 and nas1 directories are properly mounted.
3. Turn on the compute nodes.
4. Verify that condor is running. You should get a regular output from the following: $ condor_q
5. Occasionally, Ganglia needs to be restarted: $ service greceptor restart
6. Occasionally, the website also needs to be restarted: $ service httpd restart