

VLBA Power Glitches

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In the past 3-4 weeks of antenna operation at Pie Town, 3 problems have occurred that have been directly attributed to power sags. Power sags were measured as voltage drops down to 16VAC lasting from .12 to .37 seconds. No damage was done to the equipment. The following is a description of the problems as reported to me:

- 1) NPL data/converter locked up to where the position was not being updated, consequently the antenna drove into limits. Data/converter was reset by cycling power to data/converter locally (at antenna). (2/24/88) Phase C
- 2) Brake fault - disabled axis. Equipment was reset by cycling enables locally. (2/29/88) Phase C
- 3) Overspeed fault - disabled axis. Equipment was reset by cycling enables locally. (2/25/88) Phase A

In all cases the VLBA standard interface card had to be re-initialized to communicate with the Antenna Control Unit (ACU).

It should be noted that problems 2 & 3 could have been reset via computer by cycling enables for the appropriate axis. And problem 1 can be reset via computer once the "utility" M&C buss is installed. However, "dirty power" problems are frequent enough to become a nuisance, it may be desirable to install an UPS system for insurance against power glitch problems.

If you are experiencing problems with equipment located in the antennas due to power glitches and wish to have your equipment powered by an UPS system, contact L. Serna with your power requirements. So far ACU, Data/converter, and Drive cab. logic power requirements are; total 470 VA at 120V.