

power adjustments

A11: This had been powered by an AC-powered, open-frame power supply, through a SunSaver to a PCAPS battery. On Tues, replaced a blow fuse in the power supply and swapped in a relatively healthy battery. Yesterday found that the voltage was low and decided to test components at the base. In the meantime, wired a DC cable from the M tower battery box using a DC splitter cable. This arrangement is working fine. In the base, was able to charge the battery overnight through the SunSaver using the bench Tenma supply. Tenma current draw ran for several hours limited at 3A, but had dropped to 1A in the morning. Conclude that SunSaver and battery are okay, and thus that the open-frame supply is suspicious and may have sustained more damage due to lightning than just a blown fuse. If we continue to run this way, the AC cable to the cooler could be removed.

A8: battery had dropped to 11.8V (from 12.0V yesterday). Voltage on solar input was reading 20V even though pretty cloudy (had been 21V yesterday in nearly full sun). This all seemed odd. Replaced SunSaver charge controller with an identical SunSaver that was removed from A11. Now Solar in dropped to 12.1 with battery also at 12.1. "load disconnect" was on, but went off after about 20min with battery voltage now 12.4. Station is now up. I think this definitively demonstrates that the old SunSaver is bad (not charging).

M21/M22/A11: These DSMs were now all powered through a Lambda brick power supply (6.5A rating, adjusted to 13.6V no load) through an old MorningStar. The Lambda was running VERY hot (too hot to touch after 1/2 second), even before we added A11. Got a call this morning from Kurt/John/Chris recommending that we remove the charge controllers from all AC-powered stations. Used wire nuts to connect input/battery/load wires together. Adjusted Lambda down to 12.8V, as per instructions. Blew breaker on M21 DSM during its boot sequence. Moved M22's power from M21 Aux to another head of the Y cable. (Now the Y splitter is directly connected to power cables to each of M21, M22, and A11.) This all appears to work and the Lambda brick is now cool.

C: Haven't yet changed. Our instructions are to remove its charge controller as well.