

Re: micro hydro load controller

Source: <http://sci.tech--archive.net/Archive/sci.electronics.basics/2006-10/msg00265.html>

- *From:* Skipp says hello <spammenotplease@xxxxxxxx>
 - *Date:* Tue, 3 Oct 2006 22:56:58 +0000 (UTC)
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: andy baxter <andy@xx> wrote:
: – you need to have some way of shunting power to a dump load when the
: batteries are fully charged and no current is being drawn, otherwise the
: alternator may burn out.

Most often the alternator field potential is reduced in better systems.
Otherwise after battery equalizing (in better built systems) a shunt
type load diverter is used. Often you can use the extra power to move
vent air and heat or cool a building.

: – The charger is as far as can tell (I may be wrong here though)
: a standard linear regulator, which I am not sure is suitable for this kind
: of application where the input voltage may be variable. I would have
: thought that a switch mode regulator would be more suitable, as these can
: deal with a wider range of input voltages. I think this is not so much an
: issue as with wind power, since the speed of the turbine and hence the
: output voltage is probably fairly constant, so should be tunable to
: whatever voltage is required.

All depends on the potentials you're working with. If you're using lower
dc voltages to the battery bank... simply use one of the modern solar
charge controllers like something built by Trace (now Xantrex or something
like the Xantrex name).

: Do either of these things matter as much as I thought, or am I being too
: cautious?

Yes, if you want the system to work properly and last more than a few
months.

: Any advice appreciated, particularly from anyone who has any practical
: experience with micro hydro or windpower electrics.

I do both all the time but don't often get on this group anymore. You can
contact me direct through the below web page email contact icon and I'll
try to provide help as time allows.

cheers,
skipp

Re: micro hydro load controller

www.radiowrench.com/sonic