To the Reader.

Firstly I gave this record to ENERGYTECH LTD because I found a good product that worked and I like to support good products. I was not asked to do so.

I would recommend the yellow Pulse for any small systems, such as cars, boats etc. they will work.

If however you have a large battery bank then I'd highly recommend getting a higher rated unit and that I believe is the Red Pulse units. , I believe they are more powerful and operate down to 10.5V where the yellow cut of at 12.5V

I do not have any of the red Pulse units, would like to but living a remote subsistence lifestyle the budget does not presently allow such a purchase

If you don't want the trouble of moving the pulse units around, and can afford more units then one per 12v bank would be better.

My System.

This is our only power supply, we do not have the national grid backup and in fact don't even know when other people lose their power.
We live and work a self sufficiency block in northland New Zealand that does actually supply all our needs.

My system is powered by 16 X 75w PV panels.

I have 2 banks of batteries of 8 batteries each. (16 all up in this system with 2 batteries in another separate system)

Battery Bank one is 8 x 220 AH and is a new bank.

Battery Bank two is 8 x 380 AH and is 9 years old.

These are linked through buzz bars and can be swapped or separated to carry out work on the system without downing the power completely.

This is the supply for a 24v inverted system to run our entire house with fridge and freezers and small farm, if these battery banks play up we have no power and I cannot afford to play games here.

Last year the panel and battery voltages got quite high in the long days of summer and even reached 33v and 34 worrying volts over the low voltage system. However the Bank 2 batteries were not holding that power and in fact were dragging the entire system down.
I knew I had a few "problem children" in that bank.

After getting the units from ENERGYTECH LTD Australia the first tests I did was on some very small (only 1.2 AH) 12v battery we use to power 24 high powered LED headlamps for hunting.

These responded quite well in even a short time I had the Pulse units connected.
I've never seen these tiny batteries hit 13v before; they did, and they are holding that now whereas before they only held about 11.5.
What's more the battery didn't appear to heat up as much so I moved on to the house batteries.

The Main Banks.

I tested every battery in the banks and ID'ed the problem children.

There were 4 problems on "bank two". These batteries were very uneven on the hydro test down around the 1080''s and lower and voltage were down to 5.9 and they were dragging the rest down.

I then took two of the problem children out and replaced them with batteries that had been "Pulsed Commercially".

I'd replaced these two because I wanted the problem batteries at another location to work on later.

I then worked my way across the banks 4 batteries at a time, (for about 3 weeks each block) till they were hydro testing at around 1280 or better across the cells.

I left the two remaining problems till last, they were uneven but around 1100 across the hydro reading.

These last two batteries in bank two I left both pulse unites on for about 6 weeks.

Last time I tested (about a week ago) these problem batteries, (that were the worst left in 'bank two'), have now come up to be equal to the best and I'm about to begin running the Pulse units over the entire bank again.

Since the plates have begun to clean up the high voltages I referred to above have dropped to tops of 29-30V. I believe this is because the power has more battery plate to absorb the charge thats being poked at it is now being retained, because on the other end of the day we are getting much higher voltages being held for much longer into the night.

For example whereas at first the Pulse units were clicking off at about 8:00pm because of low voltages, each night I found the Pulse units switching off later and later by about 30 minutes a day till now they are working 24 hours a day showing the over all bank system voltage has improved and that we are now able to keep the bank voltage over 24v.

Latest Hydrometer readings have leveled quite well across battery bank two.

Because summer is coming to an end I've taken one of the Pulse unites up to the other site to bring up the really bad children (batteries) I removed earlier.
This other site only has 130w of solar power supply but the batteries are not used very often so they are going quite well.

After testing on the real small batteries at the beginning of my tests, I'm now using this other site system to charge all my small hand held batteries that we use for night hunting or checking stock etc.

I had for example another 2 X 6v batteries for a hunting lamp, one was only holding 5.5v's at best, the other was only holding 4.8v on a good day.
No matter what I did to charge them, by the following day the power had dropped and the use time of the lamp was down to minutes instead of hours.
I put one Pulse unit over these two batteries and left it in this system for a week.
Sealed batteries so can't give the hydro, but these two batteries now read and hold 6.2v even.

So to sum up the Yellow Pulse units do work, they are from what I can see, designed to clean up smaller banks or single batteries such as cars or boats and they work well in those situations.

I'm happy with the two yellow Pulse units I got and highly recommend them, but if you have a large system of deep Cycle batteries like mine then go for the red Pulse units.

Neal King

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