

Hello,

I would like to share with you my project about dump load regulator. I think that it would be interesting to continue to improve this technology.

Presentation

I'm Bastien from Atelier Sesame and member of Tripalium.

Self-employed as electrician, i also give the training courses to build wind turbine and install some.

As I told at the Athens 2014 WE meeting , I only use self designed regulators since I have a wind turbine. It means since march 2010.

I have skills in electricity, electronics and thermic. To build and make researches, we have some fablab in Brest, and I also get my ownworkshop with a few electronic material and some tools.

The regulator zacharie 5.0

Briefly, the actual specifications are :

- Only component easy weldable
- Only analog component, no program inside, no need of computer to make it
- Everybody can build it
- People with basics electricity skills can understand all of how it works !
- Open source
- 30°C max more than ambient temp
- Can drive 30A
- You also can find photo in attachment and a link to a video that shows the stability of the regulator in voltage : https://www.youtube.com/watch?v=mz_d8ZefAgo

Done work

- Good results with it (**4 years reliability**, 16A ok, temperatures ok)
- Build some for other people (6 orders)
- I organize a workshop in 2016 and trained 3 people to make their own regulators
- Clement Gangneux drive by Jay Hudnall make some work last year that can be reused on the regulator (zacharie 5.0 have been used in this work).

To do

- The regulator needs a design review to be both cost effective and more powerfull. I have a precise list of changes that should be implement in the last version
- A book to build it (guide)
- Change this regulator to make it drive about 60A instead of 16A and make a few changes on

the design

- Make tests with other qualified people
- Write the manual to build it with unqualified persons

Needs

- I need one or two people who **want** to make his own regulator for a wind turbine **that turn or will turn**. It could be good if this people had skills in basics of electricity but not on electronics. In this way this people could see what is important in the building manual design.
- I need one or two people with good electronics skills to help on the design and to make reviews. I have ideas of people who could be interesting with this project.
- A few materials to make tests during and after
- Money to valorize the work on the regulator.

I would like to share this work properly and with respect with my own work and the work that will be done. It could be interesting to also receive ideas of market models that can empower the project and be interesting for the final users. With an **understanding** of electronics issues, i'd like to work with novice and more specialized WE members to develop this project. Finally i'd like to **lead this project**.