

**sdmay18-41: Energy blockchain implementation for free market P2P energy trading**

Week 9 Report

November 14 - November 20

**Team Members**Joseph Staudacher — *Hardware Design*Alec Dorenkamp — *Blockchain Developer*Noah Eigenfeld — *Blockchain/web app developer*Brendon Geils — *Blockchain/smart contract lead developer*Jackson Myers — *Hardware/embedded programming*Arun Sondhi — *Hardware/software interface***Summary of Progress this Report**

- Worked on ADC - Raspberry Pi integration: made significant progress but a small amount of additional troubleshooting is necessary
- Web app is now cleanly implemented with basic usage graph, summary, and team information
- Found candidate for hardware implementation demo
- Further worked on a hardware demo and the final hardware design
- Decided to hold off on committing to an energy market implementation using blockchain: further research required

**Pending Issues**

- Fix ADC-Raspberry Pi functional issues

**Plans for Upcoming Reporting Period**

- Further expand web application capabilities
- Finalize project documentation
- Finalize a concrete testing plan
- Prepare for final review

**Individual Contributions**

Team Member	Contribution	Weekly Hours	Total Hours
Joseph Staudacher	Spoke to an electrician to research power measuring methods. Spec'd our AC line splitters to find hardware compatible with our current clamp. Began to revise final report documentation.	8	52
Alec Dorenkamp	Worked on dashboard to add additional visual graphs based on user history (in progress). Researched most efficient ways to allow user to download certain usage datasets. Started	7	59

	final presentation prep		
Noah Eigenfeld	Setup local development stack and made everything synchronized with the rest of the software team Started final presentation prep	7	62
Brendon Geils	Built out the api more robustly. Added error catching on the dashboard. Began to revise final report documentation.	10	90
Jackson Myers	Worked to debug raspberry pi current measuring and external ADC readings. Researched options for pcb design software and components that would be required. Developed and refined an overview of our project to a general audience for presentation. Began planning for final revisions of documentation and panel presentations.	10	65
Arun Sondhi	Worked to resolve issues functional issues with the ADC and Raspberry Pi Began to revise final report documentation	9	63