

EE/CPRE/SE 492 BI-WEEKLY REPORT 07

INTRODUCTION

Date: 12/6/2019

Group Number: 21

Project Title: Battery-less IoT Devices

Advisor: Dr. Henry Duwe

Clients: Dr. Nathan Neihart, Dr. Daji Qiao

Team Members:

Derek Nash – *Meeting Scribe, Power Systems Engineer, Test Engineer*

Matt Goetzman – *RF Systems Engineer, Test Engineer*

Mohamed Gesalla - *RF Systems Engineer, Test Engineer*

Adithya Basnayake – *Report Manager, Power Systems Engineer, Test Engineer*

Mohammed-Al-Mukhaini – *Meeting Facilitator, Embedded Systems Engineer, Test Engineer*

Bradley Rhein – *Embedded Systems Engineer, Test Engineer*

PAST WEEK ACCOMPLISHMENTS

This week we submitted our poster and finalized the demo.

As a whole team we designed the poster, soldered the final voltage regulators and CW rectifiers, built the final model and tested the final model.

RF team took antenna S11 measurements.

PENDING ISSUES

INDIVIDUAL CONTRIBUTIONS

Team Member	Contribution	Weekly Hours
Derek Nash	Soldered the final voltage regulators and CW rectifiers. Built the final model.	15
Matt Goetzman	Took antenna S11 measurements. Worked on poster	10
Mohamed Gesalla	Working on power calculations. Worked on poster	10
Adithya Basnayake	Tested different voltage regulators with our test prototype. Helped with the poster.	10
Mohammed-Al-Mukhaini		
Bradley Rhein		

PLANS FOR THE UPCOMING WEEK

We will present our design to the Industry Review Panel on Wednesday, Dec 11th at 9:00am. We'll also submit our final design document on Dec 10th.

SUMMARY OF WEEKLY ADVISOR MEETING

Dr. Duwe offered his critiques on our poster, which were very helpful. He also asked about the newest voltage regulator and the specifics of the demo. He said we can borrow the Power Harvester RF blaster and antenna, but he'd much rather see us set up a constantly-active Wi-Fi router and use our patch antenna to power the circuit.