

# Senior Design Meeting Agenda — Microgrid Team

10:00AM Thursday, April 22nd, 2021

205 Stinson Remick

Meeting Leader: *Kelsey*

Secretary: *Sylvia*

## 1. Follow-up on battery charging

- a. Brian - analogous local storage implementation

## 2. Follow-up on UART communications

- a. Dan and Kelsey

## 3. Display Subsystem updates

- a. Recognized problem with why arduino test was converting to decimal but not when connected to control system
- b. Currently working on separating data into respective fields before converting and displaying them
- c. Restructuring GUI

## 4. PCB build progress

- a. As of Tuesday morning we have completed the soldering of one board but can't get it to program (Failed to get Device ID)
  - i. But the LED lights up for both power sources: mini-USB via laptop and barrel jack power via AA battery clip
    - 1. Bad programmer connections?
  - ii. Re-soldered decoupling capacitors on the bottom of the board to remedy bridging
    - 1. Mislabeled canister for 0.1 uF capacitors
  - iii. Positioning of PIC, seems off-center and tilted a bit
    - 1. Could be issue with PGD, PGC connections
    - 2. Using PCB heat station to remove & recenter part
- b. Any pointers on how to best apply solder paste? Stencil is not preventing the solder paste from smearing
- c. Tuesday and Wednesday mornings → in process of building a second board (control board, with only 1 power monitoring chip) using minimal solder paste

## **5. Questions**

- a. Expectations for final functioning system → use of breadboards vs [prototype boards](#)?

## **6. Miscellaneous**

- a. Updated website with photos, design review docs, agendas, etc.