

## Meeting Agenda:

Winter Break Game Plan Followup

- I) **Lighting Network**
  - a. With 12V Power Input
  - b. Modeling in Cadence
- II) **PY Programming**
  - a. CFD/DFD
  - b. Psuedocode
    - i. Initialization
    - ii. Communications and Comms Check
    - iii. Lighting Activation (Interrupts)
    - iv. Testing within development environment
- III) **Power Modeling**
  - a. Fix Symbolab Errors
  - b. Model New Load based on 12V Lighting
- IV) **Statics for PV Panel**
  - a. NEMA enclosures at our size are either fiberglass or plastics
    - i. Probably cannot take material stress of a post mounted to them to support PV Panel
    - ii. Consider Separate bracket arm for poles
    - iii. New mockup for posts
- V) **Budget**
  - a. Orders are in
  - b. Lighting network
- VI) **Expo**
  - a. Registration complete

- Ideas for simulating in cadence – Possibly talk to Dr. Hess because he has had previous students work with this

- Don't underestimate the coding for the lighting network because it is difficult to have multiple components to speak to each other

- Goals by Sunday

b. Control flow – data flow diagrams - Psuedocode

- o On paper design for the lighting network
- o Circuit diagrams to connect to the pi (RC)
- o Off the shelf relays possibly for switching

[https://www.adafruit.com/product/3191?gclid=Cj0KCQiA3smABhCjARIsAKtrg6KlfxqH5t34eyA1gWasF1U3JIEJzOyCoA55ckQJSBrUZxV8WRRNEEaAp3oEALw\\_wcB](https://www.adafruit.com/product/3191?gclid=Cj0KCQiA3smABhCjARIsAKtrg6KlfxqH5t34eyA1gWasF1U3JIEJzOyCoA55ckQJSBrUZxV8WRRNEEaAp3oEALw_wcB)

- o No need for interrupts in python
- o Hook up meter ports instead of LEDs just to test that we are getting the output that we will need