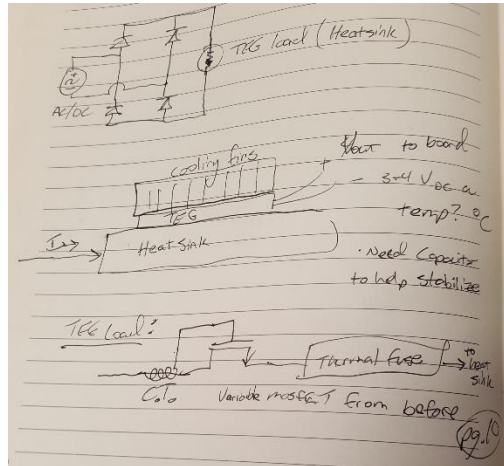


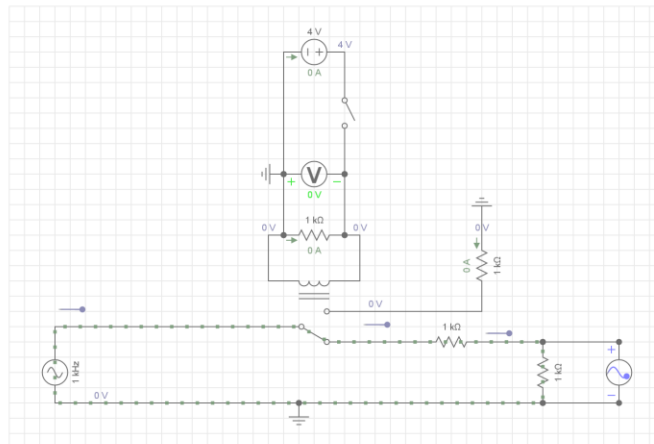
Kill-a-Watt Agenda 02/23/2016

Design Ideas:

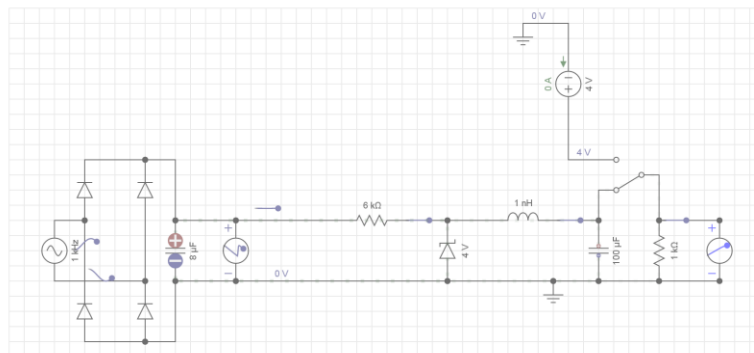
- Feedback loop Transistor Heater
 - Idea: a feedback loop on the gate of a depletion-mode transistor to continually heat TEGs



- Relay switched heating coil
 - Idea: heat the TEGs to operation with power supplied from input through direct heat
 - Components
 - nichrome (or similar) heating element material
 - solid-state relay
 - thermal paste
 - resistor
 - Pros:
 - Cheap
 - Easy to build
 - Very few parts
 - Works with AC or DC input



- TEG supplement
 - Idea: convert the input signal to 4V in the place of the TEG(s) voltage and disconnect when TEG(s) are up to desired voltage
 - Components:
 - 4 X diode
 - 2 X capacitor
 - resistor
 - Inductor
 - zener diode
 - Pros:
 - Starts controller faster
 - Cons:
 - More points of failure
 - Power lost in diodes and impedances



- Any other ideas?
- Debate the designs
 - Possibly select a design
- Discussion on specs
 - Semester 1 Team was doing minimum operating point testing last week, still no results from them as of yet