

# ENGR290: Renewable Energy

## Homework 4

Due Nov 5, 2013

### Problem 1

For the second half of the class we are going to focus on practical and hands-on applications for the material we covered so far. So for this homework you need to identify a project that you want to work on that is of interest to you. It may be to solar power your house, to fix the parking garage solar system, or anything else that is of personal interest to you and related to renewable energy. It should be small enough that it could actually be done (no megawatt generators) but complex enough to require some design. For Nov 5 you need to turn in a brief description of what you would like to do including:

1. Detailed description of the project
2. Identify all of the components required (ie. solar panels, mounting structures, trackers, inverters, batteries, generators, etc)
3. Objectives of the project (what do you plan to achieve?)
4. Brief outline of the procedure you will take to accomplish the objectives.

We will be using Homer and/or SAM to design and analyze your system so make sure you have access to a computer with Homer and SAM installed.