EECE325 Fundamentals of Energy Systems
Dr. Charles Kim
Spring 2023

EXTRA CREDIT OPPORTUNITIES (100 points)

A. INSTRUCTION

This voluntary extra work may earn you additional 5 points toward the total course points of 100.

B. PROBLEM

Analyze the following proposal with supporting calculation and state under what conditions/assumptions she would achieve her goal in the proposal. **Proposal**: A student made a proposal to solar power her parent's home in a **City and State**[1]**.** Due to the slope of the roof, the tilt angle of PV panels has to be equal to latitude minus 15°. The total system cost is planned to be paid by annual payment of $12,000. Her goal is to make the cost of energy (COE) $1.00 [$/kWh ac] or less.

C. SUBMISSION

1. Electronic or hardcopy submission
2. Due: (F) May 5 8:00pm
3. No extension.
4. No late submission accepted.

[1] If the last digit of your student ID is in the range of [0 – 2], your city and state is Oklahoma City, OK; for the ID in the range of [3 – 5] , Sterling, VA; and for IDs in the range of [6 – 9], Mobile, AL.