

REPOWERING THE CISE SOLAR ENERGY PLANT



Presenter

Mark Kerby

Advisor

Jonathan Miles

Mark Kerby taking an inventory of materials of the current CISE Solar Energy Plant.

The purpose of this project is to review the original design of the CISE solar energy plant, located on the hillside in front of the Integrated Science and Technology building, modifications to the facility, and develop a plan to re-power the facility with an assortment of state-of-the-art photovoltaic panels. An initial inspection of the current facility revealed that the original panels still in place are old and

present a very low generating capacity thus suggesting that the generating capacity of the plant can be increased by as much as five-fold by replacing the original panels with new ones. The new design also considers the benefits of upgrading the inverter and other components. A re-powered CISE solar plant will also provide a more effective teaching tool as students will be then be able to measure

the performance of different panels types as they perform under identical conditions. A renewed and refreshed CISE solar energy plant will continue to provide an on-site clean energy source for the campus and a unique teaching tool for many years to come.