

Question 6: Statement of Research Project

Description of the Research Project: This application for an experimental license is for transmissions from a 2U (20cm x 10cm x 10cm) CubeSat. The CubeSat, referred to as CSUNSat1, has been designed, built and tested by students and faculty at California State University, Northridge. CSUNSat1 will conduct research on a low temperature capable energy storage system consisting of a low temperature capable battery and two ultracapacitors.

Necessity of Communications Facilities: During the mission a series of experiments will be conducted onboard CSUNSat1. These experiments will be controlled by commands from a ground station at California State University Northridge. A separate experimental license will be sought for this ground station. CSUNSat1 will perform experiments on command. It will then be necessary for the telemetry data to be transmitted back to the ground station so that the results of the experiment can be evaluated.

Adequacy of Existing Communications Facilities: There are no existing space station facilities to perform this downlink. CSUNSat1 will be launched to the ISS in March 2016.