

Naval Network & Space Operations Command (NNSOC)

**Naval Surface Warfare Center Dahlgren Division
Dahlgren, VA**

**Technical Assignment 2
Chris Ankeny
10/26/2006
Dr. Mistrick**



Executive Summary

This technical report will analyze the existing electrical system at the Naval Network & Space Command (NNSOC) located in Dahlgren, VA. Using the National Electric Code (NEC 2005), I was able to find the lighting, receptacle and equipment loads to sum the volt-amps (VA) to find the building power loads. Comparing these values to the single line diagram and panelboards, I was able to see if the equipment was sized correctly.

After analysis, the building electrical system seems to be sized correctly and allows room for growth as well. Having redundancy has made the system large, but being able to operate even when the power goes down is a must for a facility such as this. Lastly, a utility rate structure was supposed to be analyzed, but a few factors caused this to be unattainable.