# **Technical Assignment #3**

Nathanael Paist Construction Management Faculty Adviser: Dr. Messner Two Liberty Center Arlington, VA



## **Executive Summary**

#### **Critical Industry Issues:**

This section offers a look into the topics discussed at the PACE Roundtable. The critical issue identified from these discussions is the current and future impacts of the cost of energy on the decisions made in building construction.

#### **Critical Issues Research Method:**

The impact of energy costs on new building construction will be investigated for a variety of building systems affecting a buildings consumption of energy. Value engineering options will be created that will reduce the impact of energy costs by building a more efficient building with minimal impact on budget constraints.

### **Problem Identification:**

#### Analysis 1:

Applying to Two Liberty Center all applicable value engineering options developed in the research portion of this assignment and reviewing all of the impacts that those options will have.

Analysis 2:

Re-sequencing the construction of the pre-cast concrete façade for Two Liberty Center. This analysis will review the schedule impacts of the re-sequencing as well as the constructability of this process and the site logistics involved.