

## **2016-2017 SWEA Projects**

### **Program Director: Yuhsin Hawig**

#### **Team A:**

##### **Plant Tour/Customer Enhancements**

##### **Team Coaches: Lucian Munteanu and Jay Nix**

Tours conducted at many Southwire Facilities are currently a less than rewarding experience due to the inability of guides to properly communicate with their groups due to the excessive noise within the plants. If this project is approved, the SWEA team will develop, test and evaluate methods of improving the audio and visual communication tools to enhance the current experience that are also in keeping with the 'Culture of Zero' safety standard. These strategies include but are not limited to:

- Wireless Communication
- Visual displays
- Automated interfaces
- Portable Video Systems – possible integration in an App

The Team will investigate the different options available for wireless headsets and work with vendors to determine the best equipment that will meet Southwire's requirements. The Team will also interact and get feedback from several departments within Southwire (i.e. Marketing, SCUPP Management, etc.) to ensure that the project is moving in the right direction and at the same time following the latest policies and safety guides.

#### **Team B:**

##### **App for HV Field Safety**

##### **Design and Build an App for Mobile Access of High Voltage Safety Documents**

##### **Team Coaches: Dave Knoll, Casey Spradlin**

The high voltage installation team requires daily access to safety training requirements, various safety documents, hazard assessments and personnel certifications during field operations.

The SWEA team will build a field accessible App that compiles all required safety documents and outlines them for the HV installation supervisor. The App should provide simple access to the documents and should act as a platform for the field supervisor to provide and record daily safety training.

The field operations of the high voltage installation team include cable pulling, termination installation, splice installation, entry to confined spaces, excavations, working at elevated heights, and working with equipment, among others. Each of these operations presents significant hazards that must be addressed on a daily basis. Today, the related safety documentation, hazard assessments, and daily trainings are provided via print-outs and binders. This is a cumbersome process that requires significant pre-planning and time from the project managers and site supervisors. The current process risks omission of safety requirements, lack of training on daily hazards, and lack documentation for on-site training.

Southwire's Culture of Zero safety philosophy is one of the highest priorities in the company. The SWEA team will work with Southwire's high voltage installation team, engineering personnel, and health and safety personnel to build this field accessible safety tool. The deliverable for the project will be an App that captures all OSHA required safety assessments and documentation for quick and easy access by site supervisors. It should include:

- Outline of all safety related training and tasks that should be completed each day
- Provide daily safety training based on the hazards to be encountered each day
  - Selectable for the work tasks to be performed each day
  - Should document the training and record each person at the training
  - Upload documentation to project server
- Provide database for all documents that should be onsite during HV field operations
- Provide Southwire's general emergency response procedures

**OPTIONS:**

- Provide field inspection checklists that should be performed periodically
  - Daily equipment inspections
  - Weekly site inspections
  - Document and upload inspection documentation to project server
- Provide procedures and forms for incident investigation