Corporate Headquarters
South Building Main Electrical System Upgrade

“Promoting financial success by creating a safe, productive work environment through customer satisfaction, effective asset management, and diligent risk mitigation.”

**Description:** The Main Electrical Switchgear and Distribution System provides power to the south headquarters building, including the company’s call center, executives, lobby/visitor entrance, and security. System needs to be upgraded in the coming months.

**Current Condition: Poor/At Risk**

The condition of the system is as follows:

- **Beyond typical life expectancy** for this system type
  - System is 36 years old; replacement is recommended at 30 years
- **Manufacturer no longer supports** installed equipment
- **Replacement parts are not readily available**
- **Recommended maintenance has not been performed** due to limited parts and high cost

**Risk:** High

The risk associated with the performance of the system is based on the following, in addition to the aforementioned condition:

- Recent infrared thermography indicates **high temperature on C-phase of a main breaker** which is of concern
- **No assurance that breakers will function** as designed
  - Failed/tripped breaker may not be able to reset and restore power
  - Breaker may not trip as required
- Studies report that **breakers have 50% probability of failure** if not maintained within last five years – these breakers have never been maintained per industry standards.

**Impact:** High

Given the business units supported by this main electrical system, failure to operate could have significant impact to safety, business, and customer satisfaction. Potential impacts include:

- Catastrophic failure could lead to **loss of life or injury** to occupants and **damage to the building** and/or systems
- **Multi-day business outage** impacting key business units and functions
  - Employee productivity costs of nearly $400,000*
  - Impact to revenue of $976,000*

* assumes three-day outage due to lead-time on parts

**Cost Estimate:** $150,000

**Timeline:** Thanksgiving Weekend (start at the closing of stores on Thanksgiving)

System replacement requires a minimum **two-day outage to the south building**. The four-day weekend would provide the necessary time for preparation, testing, and allow for contingencies. Alternate would be Christmas weekend, but has increased concern given potential for cold weather.
Critical Decision Points:

Below is a list of key decision milestones and required timelines to meet the project target date.

- 8/1/14 – Approval by management to proceed with further investigation of project and coordination with affected stakeholders
- 9/1/14 – Refined project estimate submitted to management
- 9/15/14 – Management approval of project and ordering of parts
- 9/15/14 – Order parts; minimum eight-week lead-time
- 10/1/14 – Management & stakeholder approval of plan, including temporary business operations during shutdown

High-Level Project Plan:

A high-level project plan is provided below:

- Obtain approval to proceed
- Identify Stakeholders
- Determine operating requirements of stakeholders for Thanksgiving weekend
- Identify temporary space and setup needed in North to accommodate stakeholders
- Revise estimate per support required of stakeholders
- Obtain management approval
- Order parts
- Coordinate with affected stakeholders in preparation of outage
- Communicate plan & timeline to affected parties
- Setup/implement temporary business operations plan
- Execute system replacement and conduct testing
- Restore normal operations
- Conduct project post-mortem and close-out

(Include picture of electrical switch gear)

(Include IR picture)

(Should deliver this with CRP Summary to put in context of other upcoming capital expenditures)