

Electrical

Date Completed:

2016

Construction Cost:

N/A

Client or Owner's Rep:

*Mr. Raj Singh, PE
Managing Engineer
City of Houston*

Highlights:

- ✓ **Electrical Studies**
- ✓ **Relay Settings**
- ✓ **Arc Flash Labelling**
- ✓ **Operator Training**

Photo: PPE and Arc Flash Label



WARNING	
Arc Flash and Shock Hazard	
Appropriate PPE Required	
41 inches	Flash Hazard Boundary
4.5 cal/cm²	Flash Hazard at 18 inches
Category 2	Arc-rated FR Shirt & Pants
208 VAC	Shock Hazard when cover is removed
00	Glove Class
42 inches	Limited Approach
Avoid Contact	Restricted Approach
Avoid Contact	Prohibited Approach
Bus: LP01-04 Prot: PP01-04-f-T04	

Arc Flash Hazard Analysis for Northeast Water Purification Plant (NEWPP)

City of Houston | Houston, Texas

Project Description | Conduct an Arc Flash Hazard Analysis per NFPA 70E for establishing safe work practices for electrical workers in the plant.

Services Provided | City of Houston selected KGI for performing electrical studies and an Arc Flash Hazard Analysis. KGI's scope of work included the following tasks:

- Perform an Arc Flash Hazard Analysis of the existing electrical equipment within the NEWPP.
- Determine the level of incident energy, approach and flash boundaries to personnel working on or near exposed live parts within the boundary.
- Determine required Arc-Rated (AR) protective clothing and Personal Protective Equipment (PPE) for workers inside the flash protection boundary.
- Develop Arc-Rated (AR) warning labels.
- Conduct workshops to the City's Drinking Water Operations staff.