

## Electrical

**Date Completed:**

2015

**Construction Cost:**

\$10,323,226

**Client or Owner's Rep:**

*Mr. John Msigwa, PE  
Managing Engineer  
City of Houston*

**Highlights:**

- ✓ **All Disciplines Involved – Architectural, Civil, Structural, Mechanical, Electrical, Instrumentation, Controls and SCADA**
- ✓ **Planning, Study, PER, Design Phase and Construction Phase Services**
- ✓ **Minimal Disruption to Existing Operations**
- ✓ **M/WBE goals and objectives**
- ✓ **On Budget and Schedule**
- ✓ **Cost Savings/Innovations**

**Photo:** *Newly installed electrical switchgear at East Water Purification Plant, City of Houston.*

## Plants 1 and 2 Intertie Switchgear and MCC Replacement at East Water Purification Plant

### City of Houston | Houston, Texas

**Project Description** | The project includes replacing the existing Intertie Switchgear and Medium Voltage Motor Controller (MVMC) Switchgear MCC-1 and MCC-2 with new “HSPS1 Switchgear” and “HSPS2 Switchgear”.

**Services Provided** | City of Houston selected KGI for conceptualizing the project, preparing preliminary engineering report, final design and construction phase services for this complicated project. KGI was responsible for development of detailed construction phasing plans to keep the existing plant in service during construction. The project included replacing the outdoor intertie switchgear with indoor switchgear, replacing MCC-1 and MCC-2 at the High Service Pump Station at Plants 1 & 2 with new Switchgear, construction of a new electrical room, rerouting 4.16 kV underground conductors to the new intertie switchgear and connecting High Service Pump Motor Controllers to the SCADA system. The project was started up recently with minimal disruptions to the operation of existing water plant.

