

DEWA Buildings

BMS Retrofit Case Study

THE CHALLENGE

The project is one of the first Energy retrofit project for Government buildings under Etihad Energy Services . The project scope was to implement energy saving measures for five DEWA Customer Care Center buildings, located in various areas (Zaabeel East, Hudaiba, Al Wasl, Burj Nahar and Umm Ramool) in Dubai. This project was awarded to Enova and we had to work with Enova to provide solutions for implementing controls retrofit for the existing HVAC equipments. The existing equipments were previously controlled with standalone controls and the challenge was to retrofit these equipments to implement a completely new BMS and connect them to Enova Command Control Center for all 5 buildings.

THE SOLUTION

Green Optima provided the solution to retrofit all the existing equipment with Priva Controllers and Tridium JACE controllers. All the equipment was provided with new DDC Panels and controls strategies with energy saving measures were programmed in the DDCs. Each building was then provided with a PC with Niagara Supervisor to operate each building individually from the Niagara Supervisor front end. Each building was then integrated to Enova’s Hubgrade Command Control Center using Obix driver connectivity.

Newly Customized Graphics, Histories and Alarms requirement was implemented in the project as per client specifications.

THE RESULTS

A complete BMS with connectivity to Command Control Center for centralized monitoring and optimization of energy. Utilising both TCP/IP and MS/TP networks the plant communicates with the site wide integrated graphical user interface and is fully capable of access though the worldwide web.

CASE STUDY FAST FACTS

- Existing BMS:** None, Standalone Controls
- Products Used:** Tridium JACE, Priva Controllers and Tridium Niagara Supervisor
- Total Datapoints:** 2,000
- Type of Building:** Commercial
- Client:** Enova
- Retrofit Date:** 2015
- Location:** Dubai, UAE

