

# PCS for Tatweer New Tank Batteries – 07 / 08, Awali Fields, Bahrain

**Oil & Gas**

Oil Extraction

Tank Battery Automation



**Contact:**

Prudent Solutions WLL  
 P. O. Box 11091,  
 Manama,  
 BAHRAIN  
 Phone: +973 1745 6180  
 Fax: +973 1745 6190  
 www.prudentolutions.net

**Founding year:**  
 1999

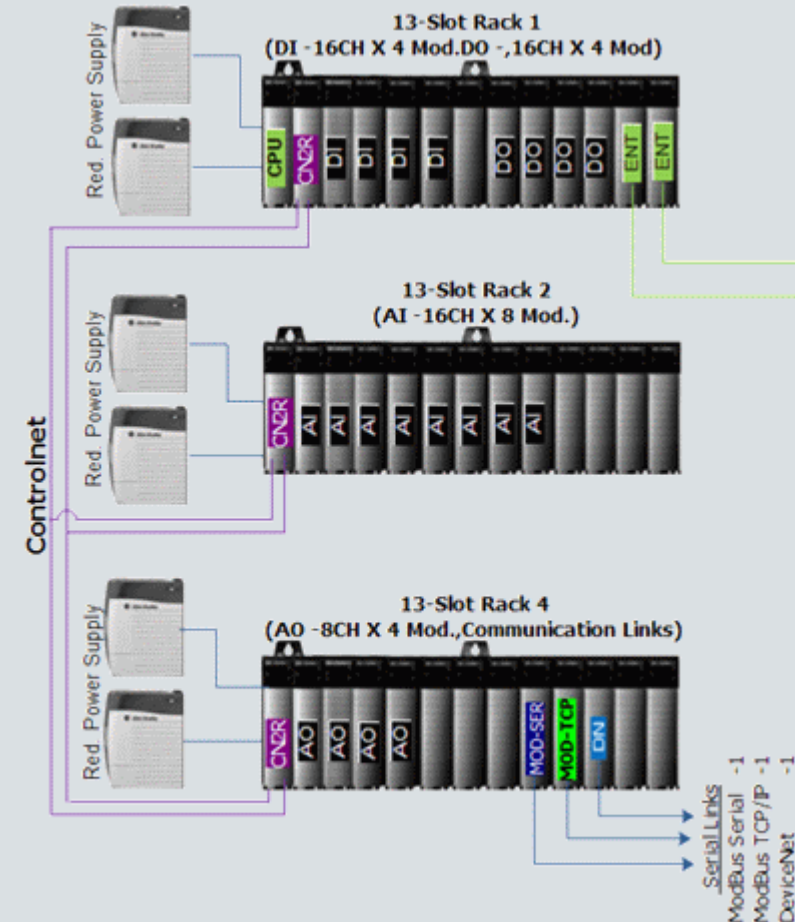
**End User:** Tatweer Petroleum, Bahrain  
**Customer:** JGC Gulf International Ltd.  
**Segment:** Oil & Gas

## Requirements of the customer:

- In 2012, Tatweer Petroleum undertook field development project to increase the capacity of the oil and associated gas production in the Bahrain Awali field & planned to install two (2) New Tank Batteries. Each Tank Battery would consist of three identical separation trains, each receiving production from five (5) new remote Well Manifolds. The remote Well Manifolds would connect to these Tank Batteries via a flow equalization header. Each train was designed to handle 10,800 bbl/day oil, 69,500 bbl/day produced water, and 1% of the total liquid volume for residual gas.
- M/s Worley-Parsons did the front end engineering for this project & the EPC contract was awarded to MCSC/JGC Intl.
- M/s Prudent Solutions WLL (MAC- Main Automation Contractor for Tatweer) was awarded the contract to supply & commission the PCS & FGS for the New TB's for remote automatic operations.

## Short description of the solution

AB ControlLogix Systems (1756-L62) with PaneView-Plus (FTView-ME) communicating to central ICONICS SCADA on Ethernet.



# PCS for Tatweer New Tank Batteries – 07 / 08, Awali Fields, Bahrain



**Contact:**

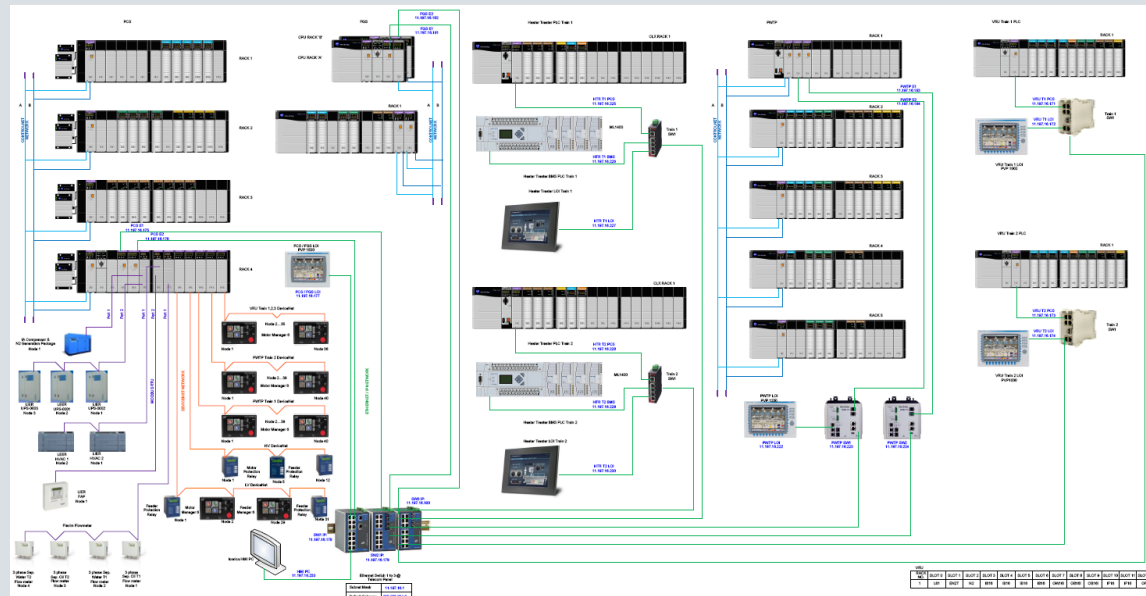
Prudent Solutions WLL  
 P. O. Box 11091,  
 Manama,  
 BAHRAIN  
 Phone: +973 1745 6180  
 Fax: +973 1745 6190  
 www.prudentolutions.net

**Founding year:**

1999

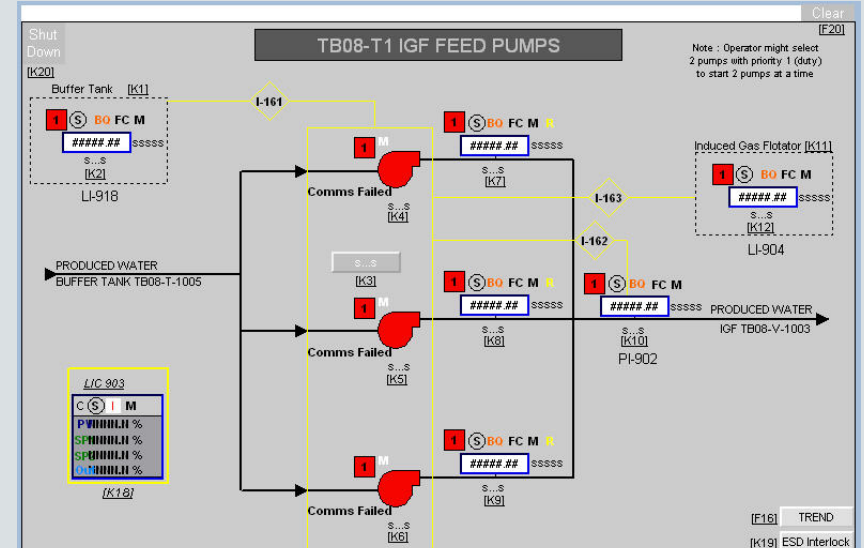
## Implementation:

- AB ControlLogix based Process Control System per Tank-Battery
- Simplex Controller, Redundant Ethernet Interface, Simplex I/O's with redundant 24V DC power supply.
- 4 no. of Modbus RS-485, 2 nos. of Devicenet and 2 nos. of Modbus TCP/IP interface links
- One 15" color, Touch screen Panel HMI (mounted on front door of the Cabinet)
- Duly wired IP-55 rated System & Marshalling Cabinets, FO Telecommunication Cabinet (with redundant layer-3 Managed Ethernet switches) & separate Interposing Relay Panel (IRP)



## Benefits for the customer:

- Robust PCS-HMI providing all the right information in the right place, at the right time.
- Optimized productivity of operators and lower risk using role-based access to process control system.
- Consistent system-wide engineering



**WorleyParsons**  
 resources & energy

TATWEER PETROLEUM  
 APPROVED VENDORS LIST  
 PEC POWER & AUTOMATION

2 CONTROLS / AUTOMATION

2.1 SCADA System  
 ICONICS (Preferred)

2.2 Main Automation Contracts (MAC)  
 PRUDENT SOLUTIONS (Preferred)