



JDW Sugar: Sugar Experimentation Facility

PROJECT PROFILE

Automation Services

The roles of Cold Energy Contracting during this project were:

- Design, Implement and Test system control strategy.
- Remote adjustment of the system control strategy.
- Remote commissioning of system control strategy.
- Create & Commission System Graphical Supervisor SCADA.

Project Equipment

- Trend IQ3 XCITE /128 Controller
- Trend IQ3 XCITE /16
- Trend 963 Supervisor
- Trend IQView 4

Control System Communication Protocols

- Trend Propriety

Project Overview

The facility comprised of a Photo Period Facility (PPF) and a Seed Processing Facility. The PPF facility operates to control the environmental conditions for 3 test chambers containing mobile trolleys filled with sugar cane plants. The tight control over the temperature and lighting conditions is used to manipulate a flowering response from the sugar cane plants. The resulting flowers are used in cross pollination for sugar cane crop improvement. The seed processing facility is used to store and process the results of the PPF experiments. The Trend control system carries out the logic to keep the system within the experiments specifications. The IQ3 controllers and their sensors are shown on the 963 SCADA system with each step of the experiment process. All alarming, logging, set points and system status can be displayed and adjusted on the SCADA system.