




Bonduelle
NORTH AMERICA

**Bonduelle Energy
Management
System**

BEMS



- The plant in Tecumseh is the first Bonduelle plant in North America to develop and implement an Energy Management System (BEnMS)
- BEnMS is a Monitoring and Targeting System initiated to have Energy related metrics readily available to a number of end users, not just the Energy Manager



- The system is able to read and report:
 - Water, air, gas, electric and steam meter data (WAGES)
 - Weather station data (temperature, dewpoint, pressure)
 - Real time energy prices
 - Real time production rates
- In the future we will be able to use the data we are collecting to accurately predict our energy consumption based on weather, production volumes and other factors



- Collaboration between Schneider Electric and Bonduelle's Energy Manager have developed the foundation for a state of the art system.
- Funding for this project came from Ontario's SaveOnEnergy program in the amount of \$75,000



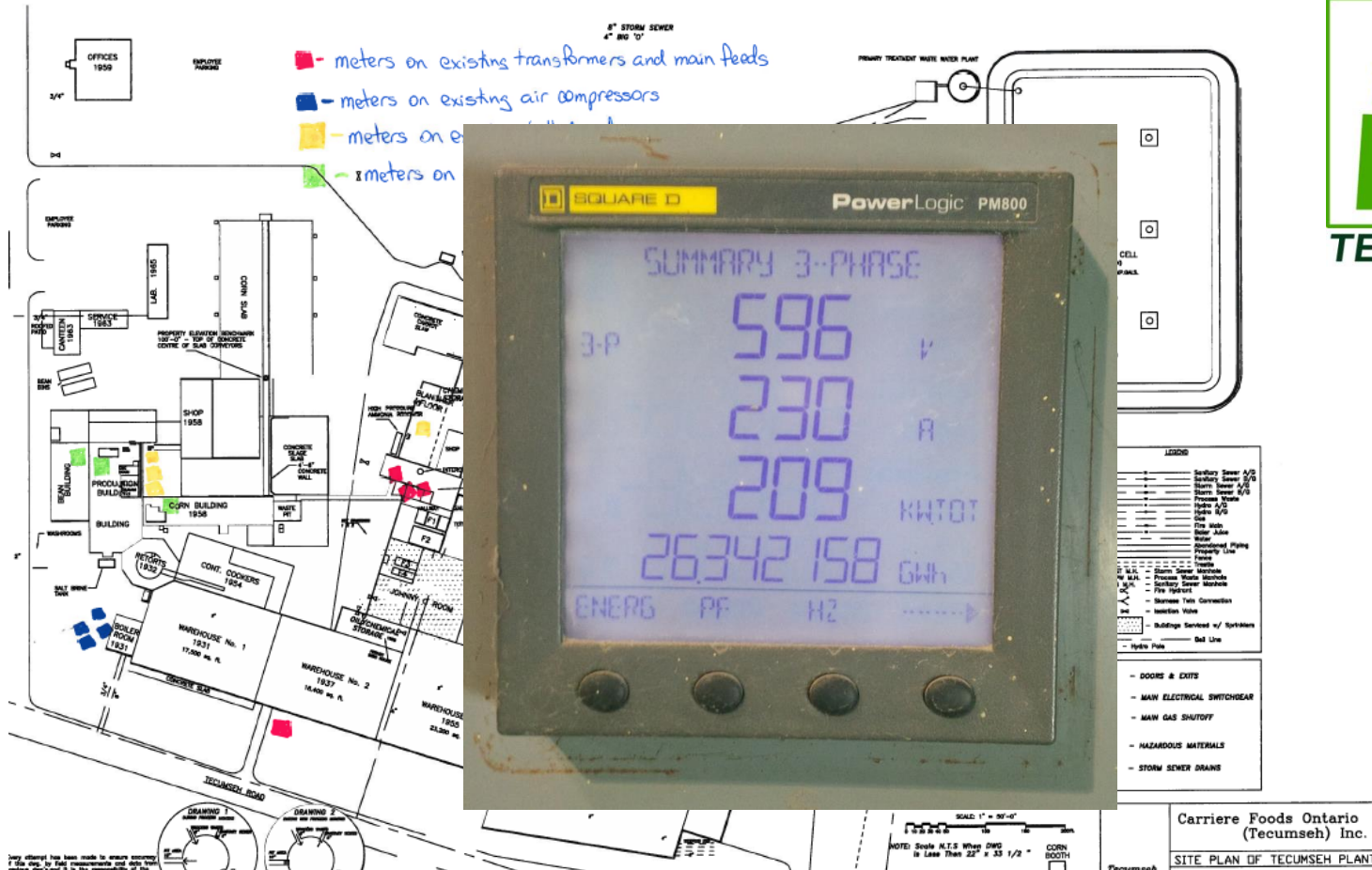


- Several different software solutions were evaluated and in the end the decision was made to use Schneider Electric's Power Monitoring Expert and ION EEM software packages



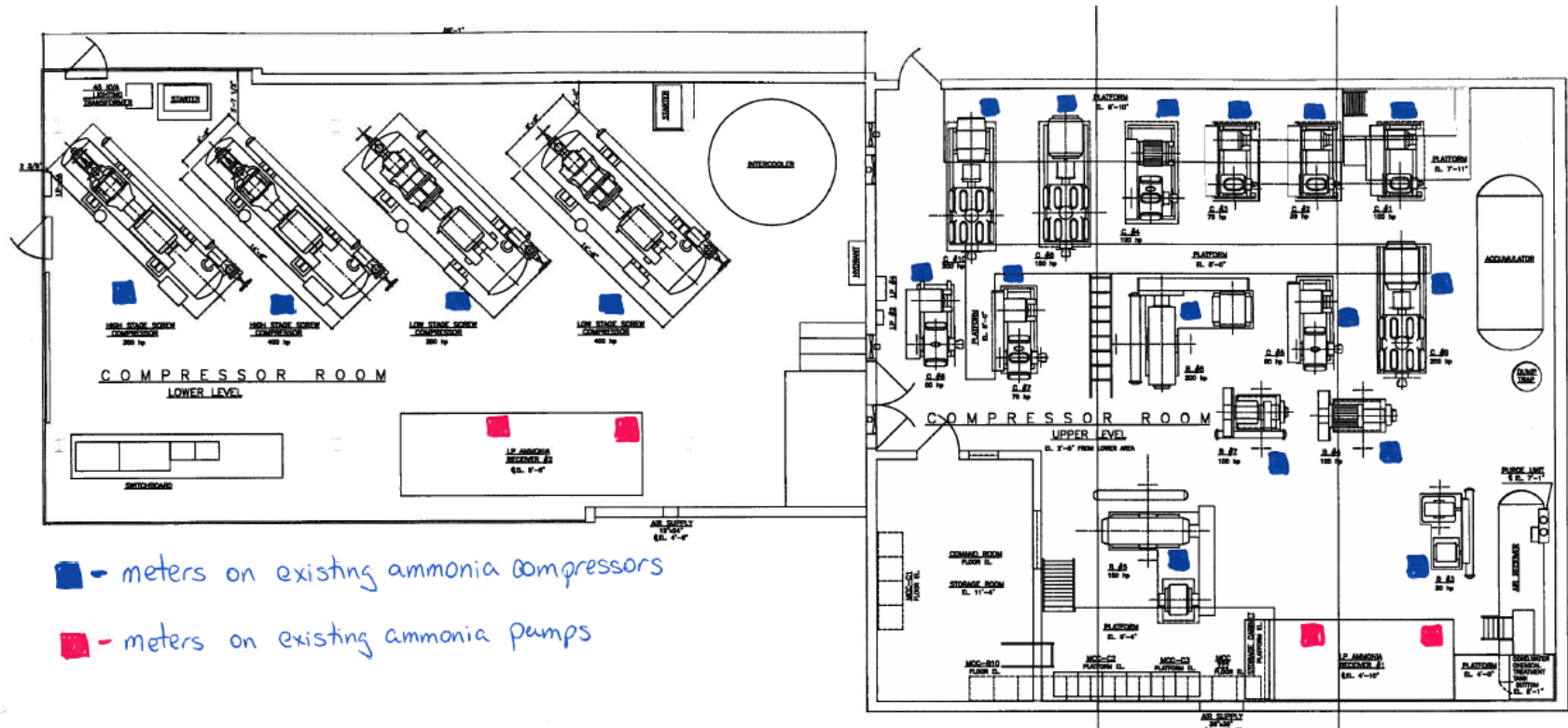
- The main reasons we chose Schneider are:
 - Ease in using third party meters (OPC, MODBUS, etc)
 - Ability to have user configurable dashboards and web interfaces
 - Ability to do multiple variable regression analysis
 - Ability to create predictive models

Electricity Meter Locations



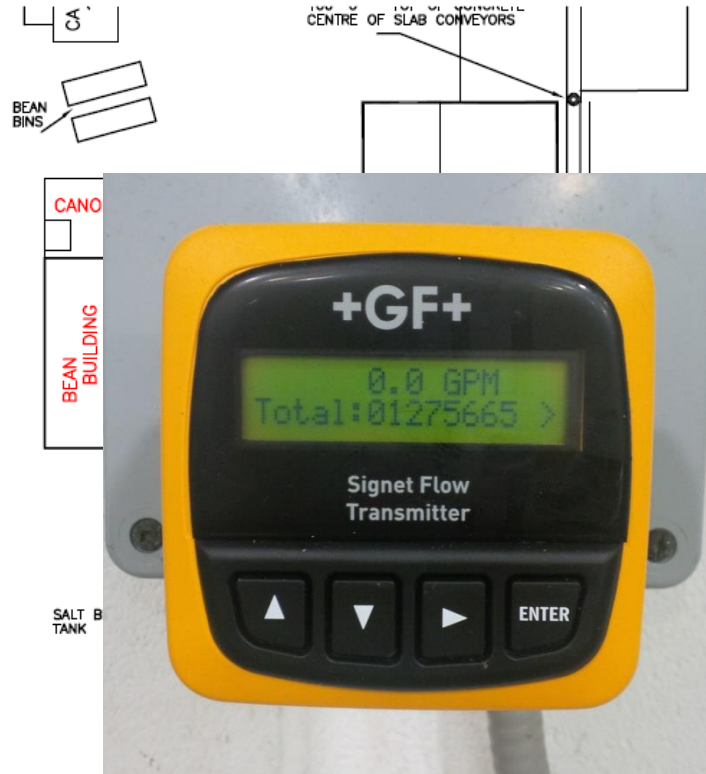
Today there are seven PM800 meters communicating with BEnMS

Electricity Meter Locations



- Additional meters to be installed in Q1 2015 for Refrigeration and Compressed Air Equipment to monitor electricity and refrigeration data.

Steam, Water and Air Meters



- New steam meters to be installed in Q1/Q2 2015
- 27 Existing water meters communicating with BEnMS
- Compressed Air Flow meter to be communicating in Q4 2015

BENMS

TODAY

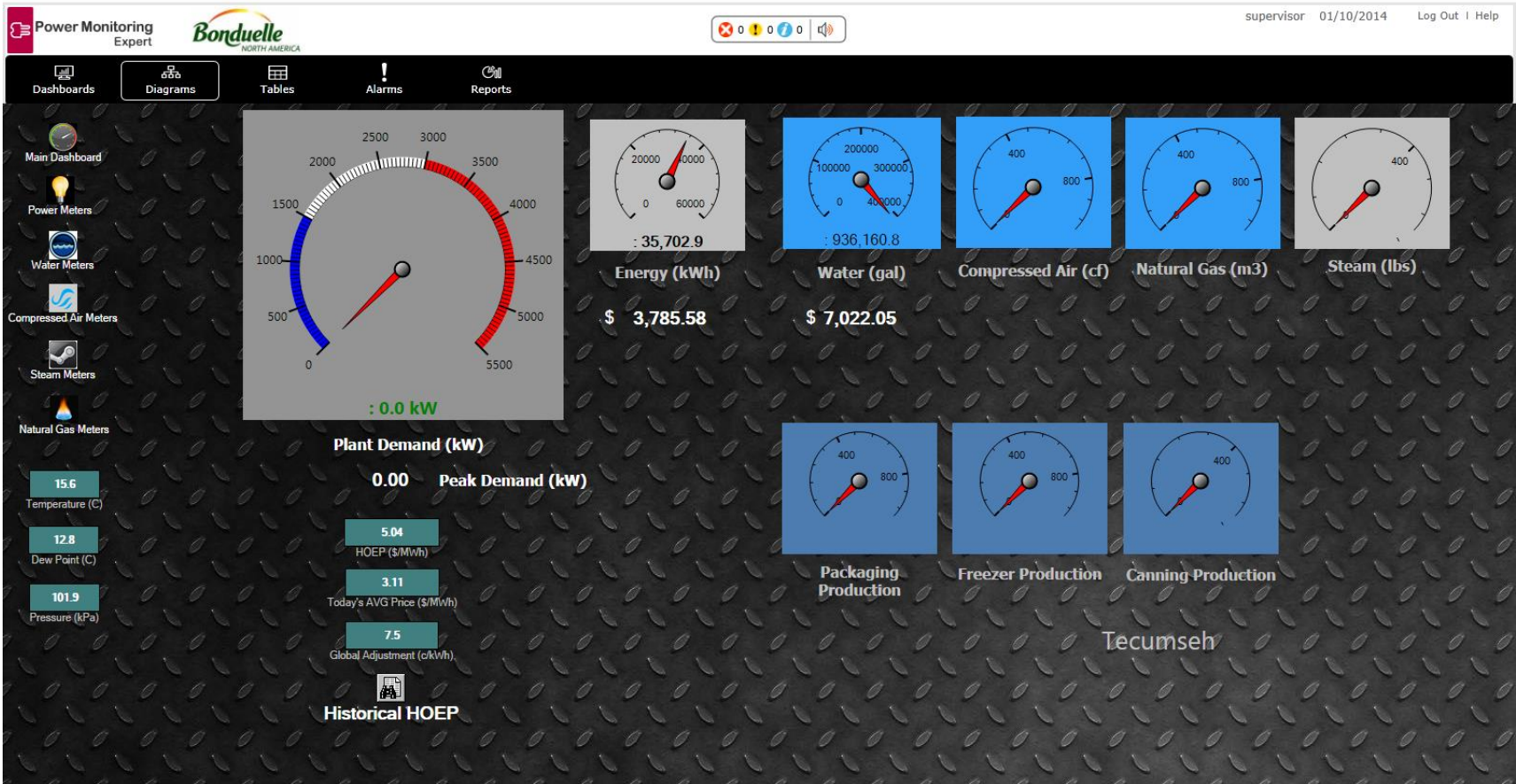
Phase 1 -
Tecumseh

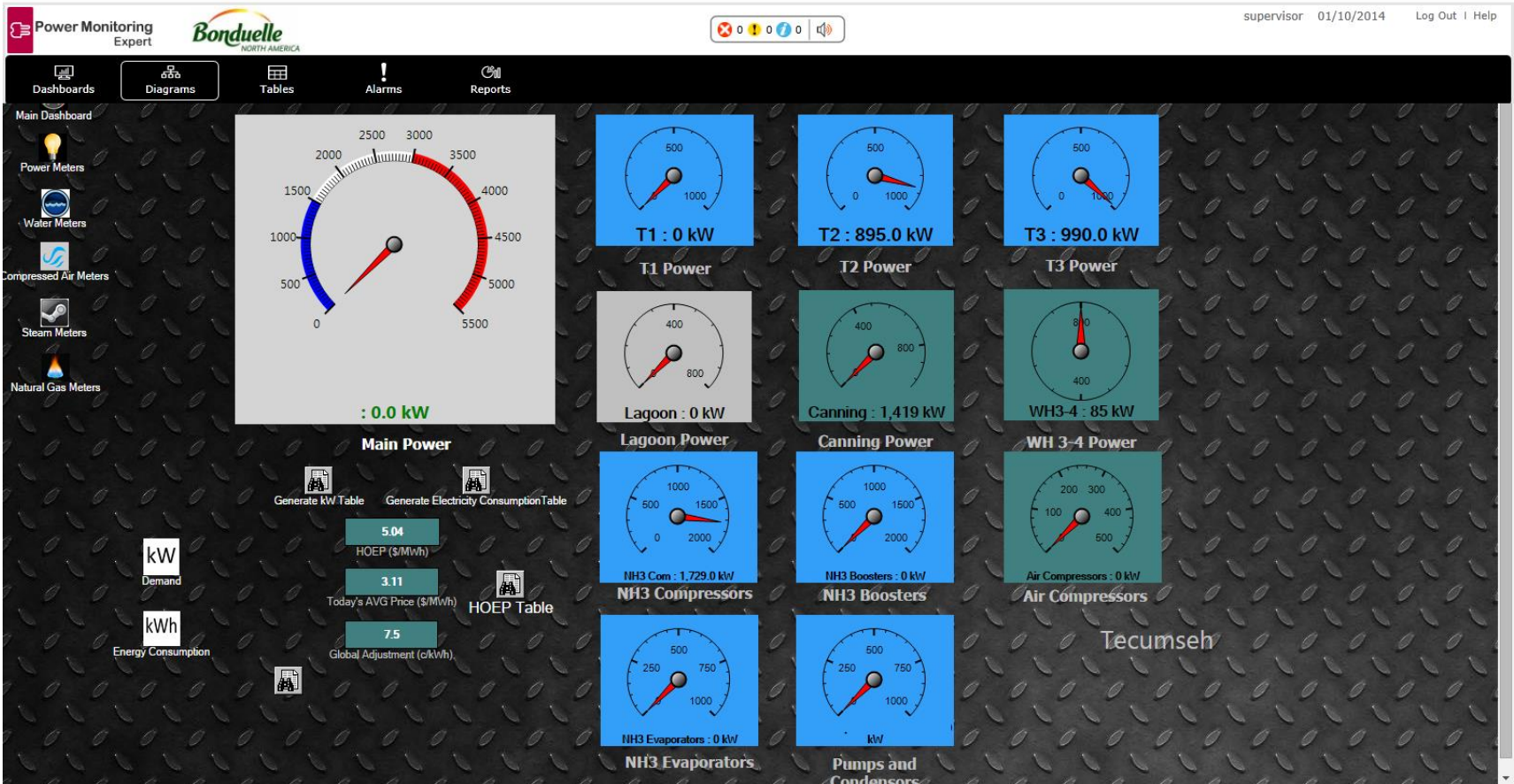
Welcome to **BEEMS**

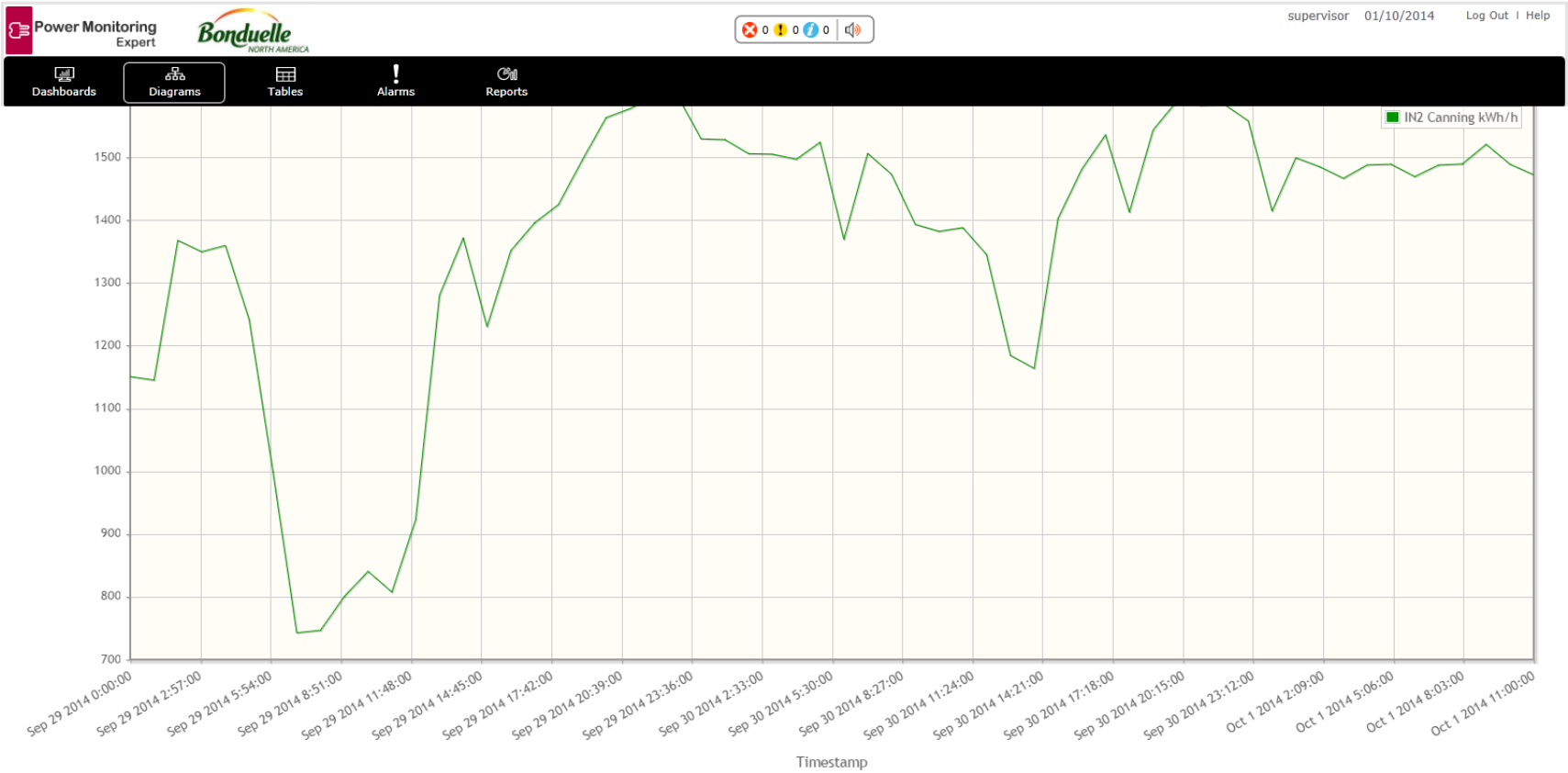


Bonduelle
Energy Management System









Left-click and drag to zoom. Double-click to restore.

Pages

7 Day Power Trend

Plant Wide Power

Freezer T1, T2, T3

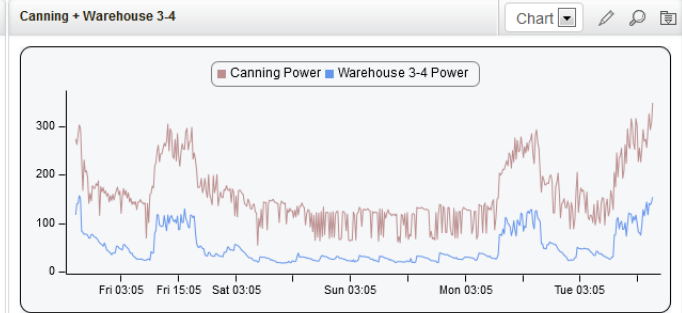
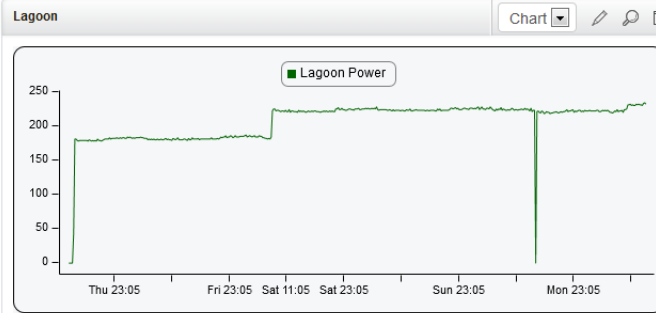
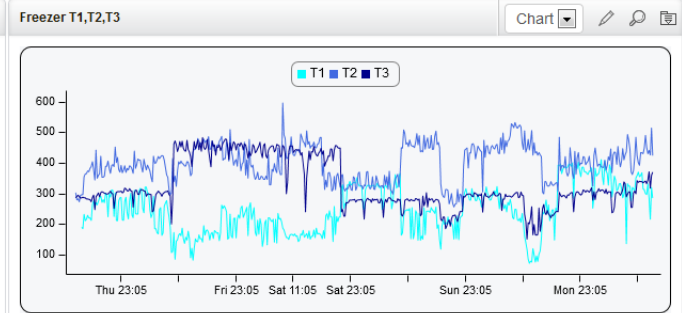
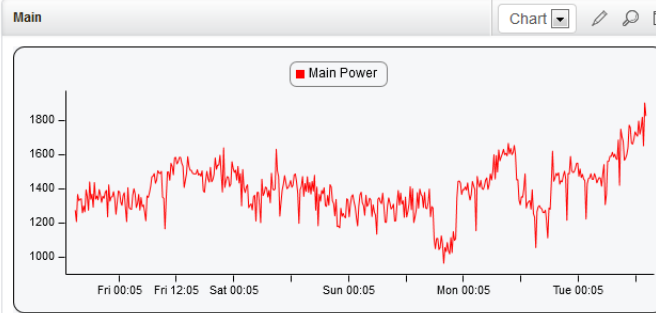
Energy Consumption by Department

Chilled Water

7 Day Trend Chilled Water

All Water

7 Day Power Trend



- ARCHIVE
- Compressed Air
- Electricity
- Natural Gas
- Steam
- Strathroy Reports
 - Freezer Compressor Power Trend (Last V
 - Freezer Compressor Power Trend (Yeste
- Water Consumption Reports

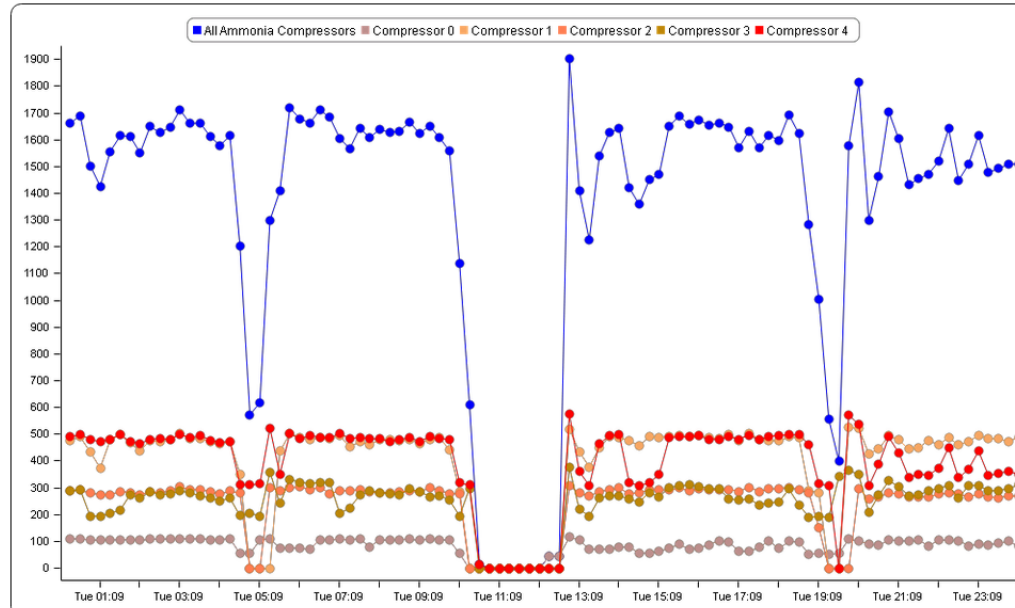
Download as

Show Input Parameters

Freezer Compressor Power Trend (Yesterday)

Trend: Ammonia Compressors Power

Trend creation date: 10/1/2014 7:22:36 AM



BENMS

FUTURE

Phase 2 –

Strathroy and Ingersoll

BENMS

FUTURE

Phase 3 –

Four Remaining US
Locations

THANK YOU

