

Chillin Idaho

Alejandro Madrigal

Cliff Brewer

Rachal Skyving

Shelby West

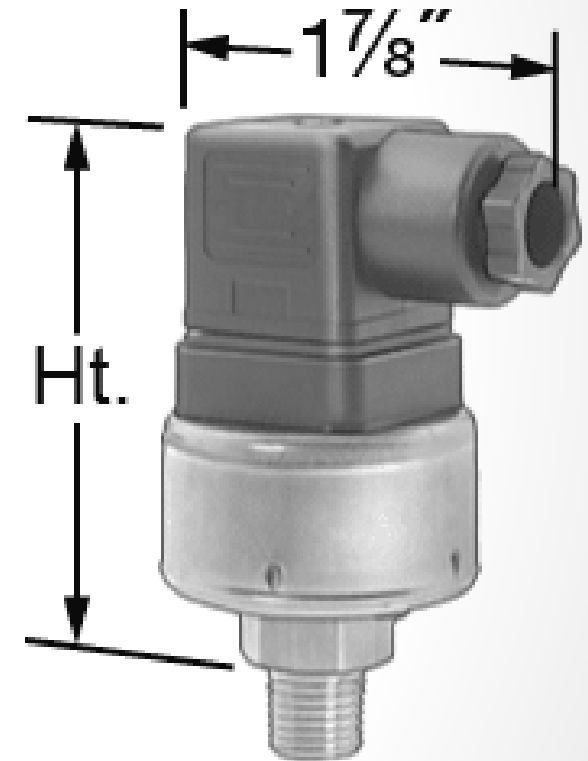
North Campus Chiller Plant

Problem Definition

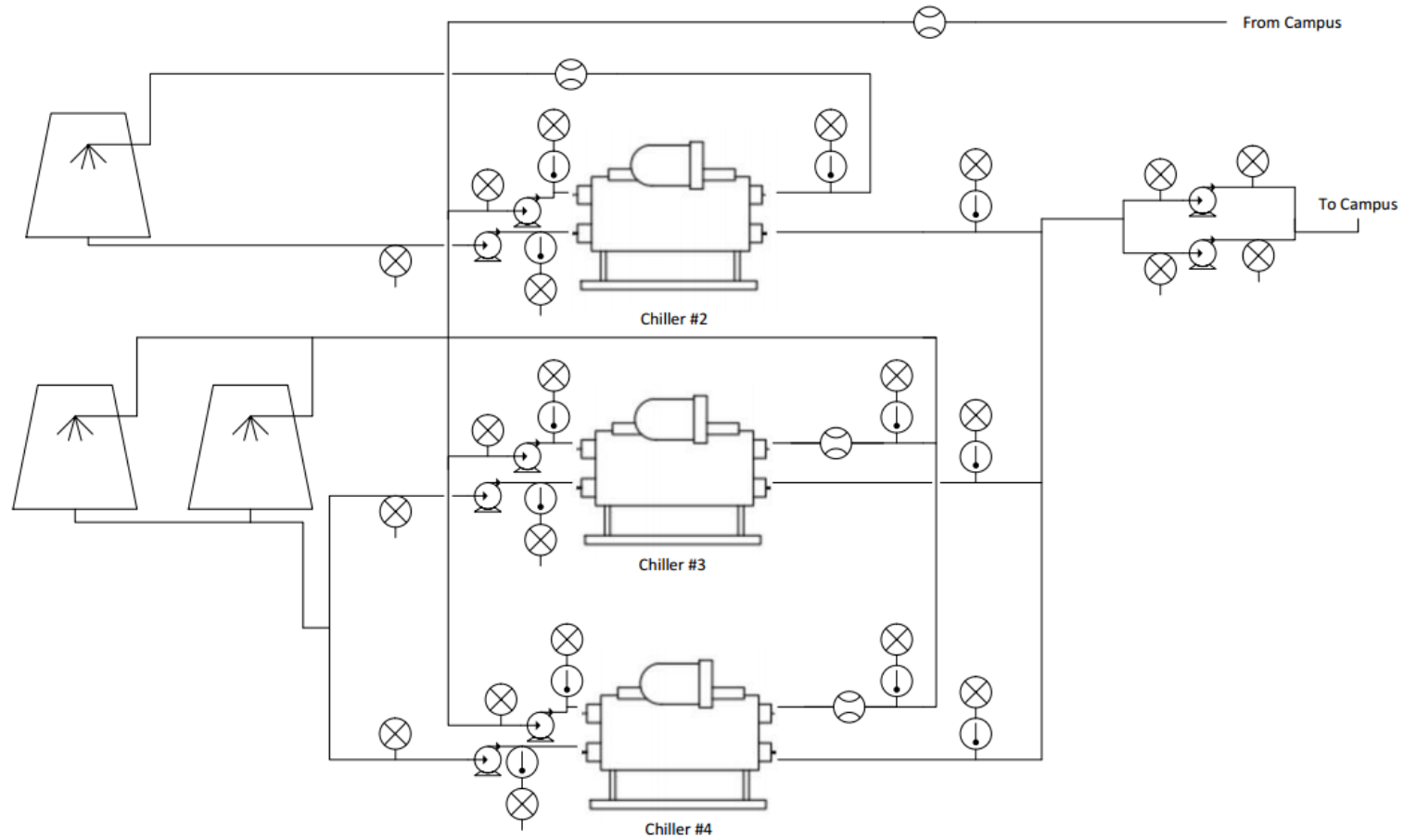
- There is lack of data acquisition devices throughout the North Campus Chiller Plant.
- A model is needed to show various states of the system and determine efficiency.

Instrumentation

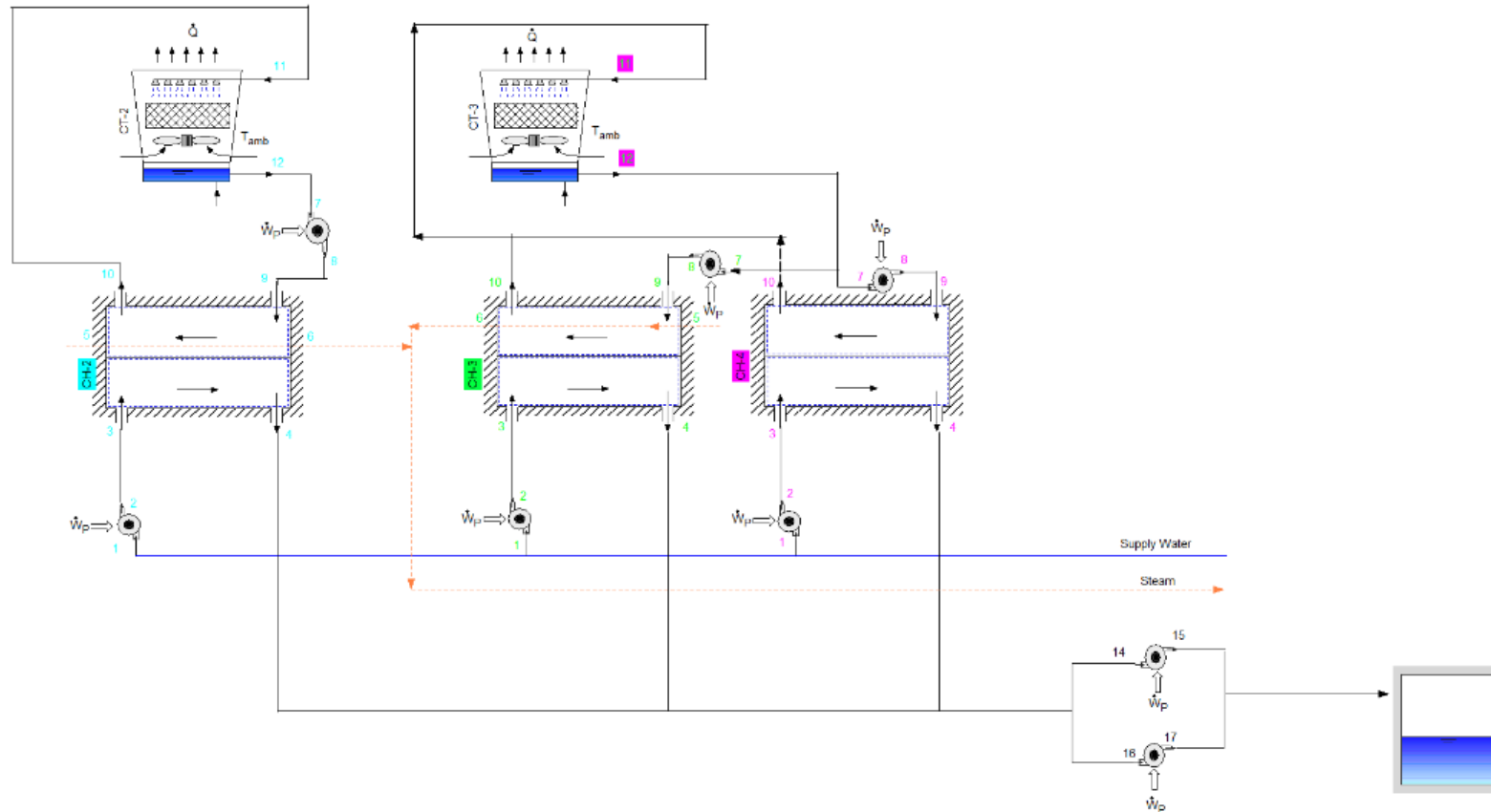
- We inventoried the sensors and found we needed 23 pressure sensors.
 - 13 sensors ranging from 0 to 300psi
 - 5 sensors ranging from -15 to 560psi
 - 3 sensors ranging from -15 to 300psi
 - 2 sensors ranging from 0 to 150psi



Visio Model



EES Diagram



Progress So Far

- Inventory of sensors
- Math model (EES)
- P&ID Model (Visio)

Future Plans

- Get all required sensors installed
 - Pressure sensors
 - Enthalpy sensors
- Collect data
 - Utilize the electronic sensors
- Revise math model
 - Add to our model as we progress with the project
- Find bottle necks in the system and make it more efficient
 - Validate our math model and use the data we collect to model and find correlations between predictions and actual running of the plant

Thank You... Questions?