A logo for a company

Description automatically generated

**Carnot Innovations Written Test – Programmer**

Please find an example of the data for one of the chiller systems we are monitoring. Chiller systems provide cooling via chilled water.  
  
Data link: <https://drive.google.com/file/d/1yctk5NGJQYibQMUth8JvNBTPMVyEhMrP/view?usp=sharing>  
  
This chiller system has the symptom of "low chilled water delta T".  That is the chilled water supply and chilled water return temperature differences are small (less than 3 Degree Celsius).  
  
Chilled Water Supply Temp: CHWS\_Temp  
Chilled Water Return Temp: CHWR\_Temp  
  
1. Please consider the readings when the chiller is on (when Comp\_Power > 10).  
2. Each of the 4 chillers (ACPC 1 to 4) would have their own temperature and power sensors, i.e.: ACPC-XCHWS\_Temp, ACPC-XCHWR\_Temp, ACPC-XComp\_Power  
3. (optional) You might also consider the flow rate of chilled water flowing through each chiller.  
  
Please provide a detailed visual chart(s) to identify and diagnose the symptom and provide the best suitable analysis.