



Chiller Replacement Report



Device Information

Chiller Number	4415Q24810
Location Name	Eight Flags Energy LLC
Location City	Fernandina Beach
Postal Code	32034-4280
Site Address	22 Gum St, Fernandina Beach, FL
Time-zone	America/New_York
Year of Manufacturing (Age)	2015(9 Years)
Model Number	19XRV6Z6647DLFH64
Report Duration	2022-02-23 ~ 2023-12-24
Chiller Run Hours	56,508



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Summary

As part of Carrier's connected chiller program our command center experts continuously monitor performance and health of your chiller and its major components to provide real time feedback and less operational disruption.

Your chiller serial number **4415Q24810** was evaluated for Chiller Replacement Analysis. Further Analysis is performed from the real time data from **2022-02-23 to 2023-12-24**. The design efficiency of current chiller is **0.51 kW/T**. The overall efficiency of this chiller is **0.52 kW/T**. Replacing this with a Carrier Aqua Series Water Cooled Chillers can improve the overall efficiency to **0.43 kW/T**. This replacement can improve the chiller efficiency by **17%**. The chiller is running at low loads (<60% RLA) for **30%** during the analysis period and this replacement can enhance design integrated part-load values (IPLV) to as low as **0.37 kW/T**.

Chiller Replacement Benefits:

- Improved Efficiency
- Reduces operating expenses.
- Easy to maintain.
- Quiet operation
- Reliable operation
- Environmentally sustainable refrigerant
- ASHRAE 90.1 compliant
- High-efficiency optimization
- Diagnostic controls

Based on the performance of the chiller operation versus measured parameters, Carrier recommends further evaluation of the Chiller Replacement by our certified technician. This will ensure optimal performance of the Chiller.



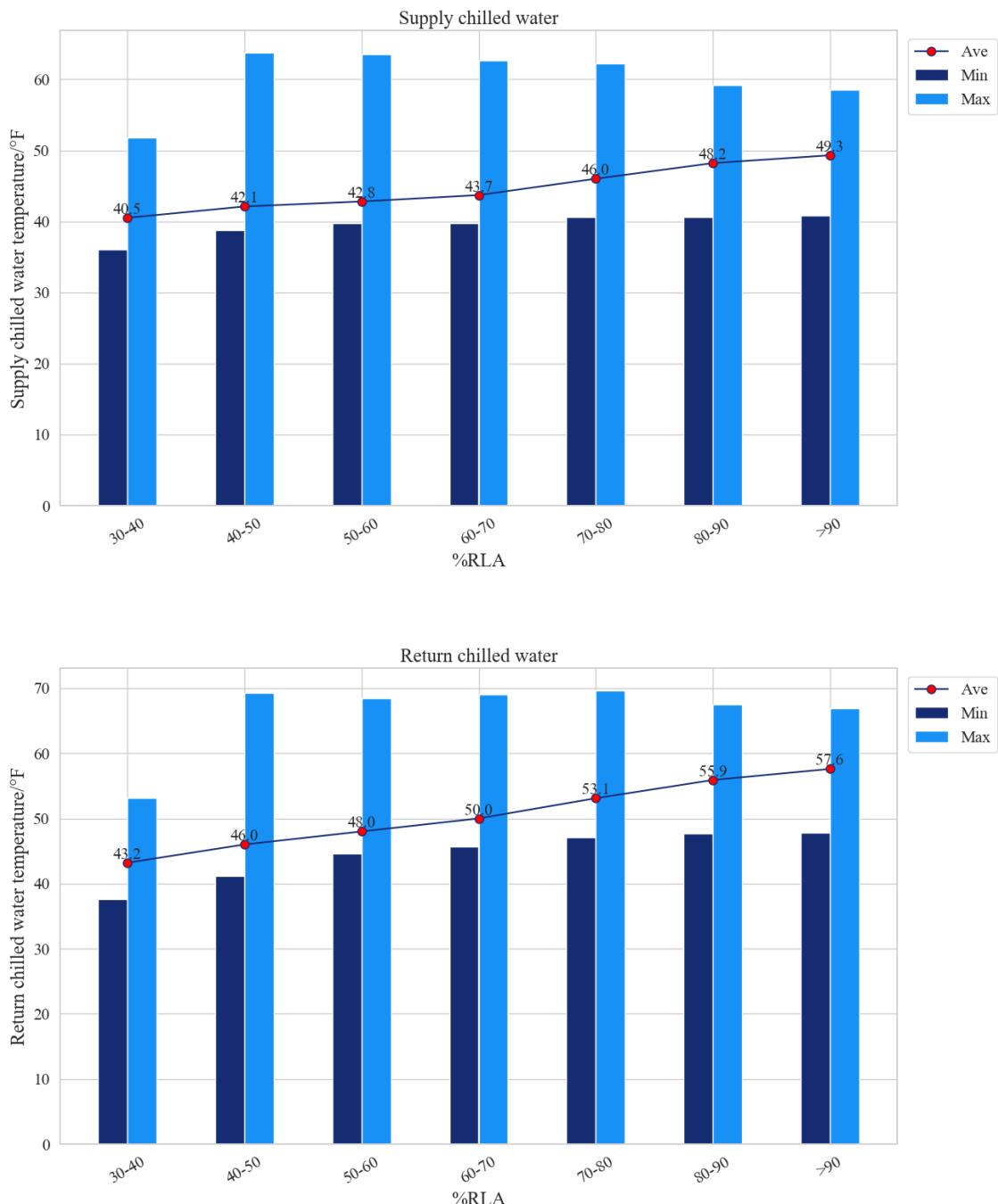
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Alarm/Setpoint Analysis

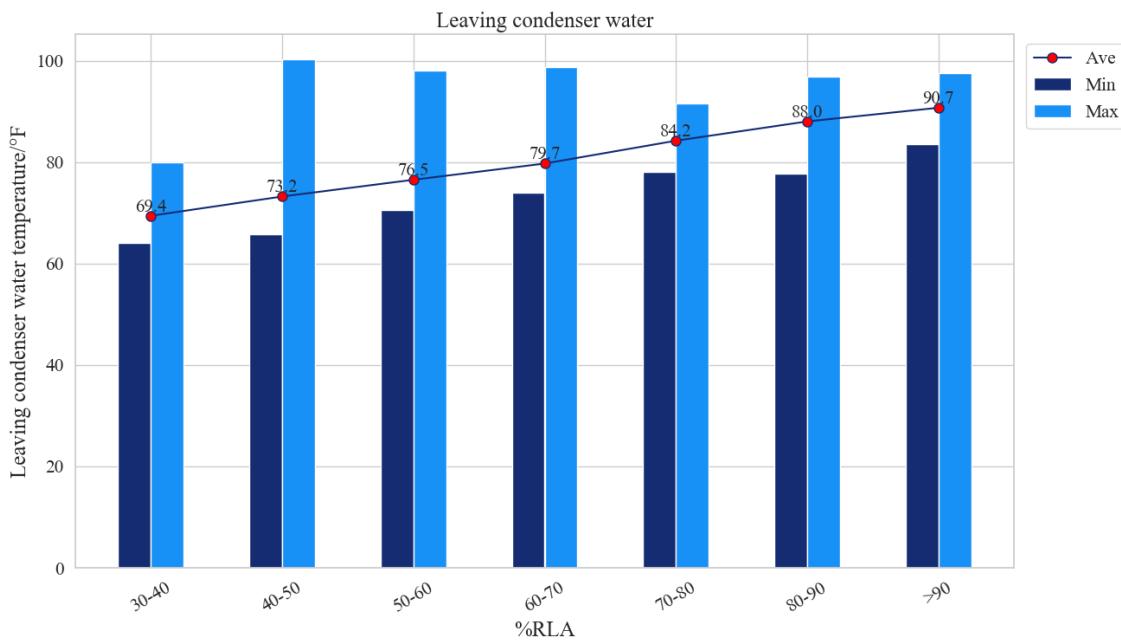
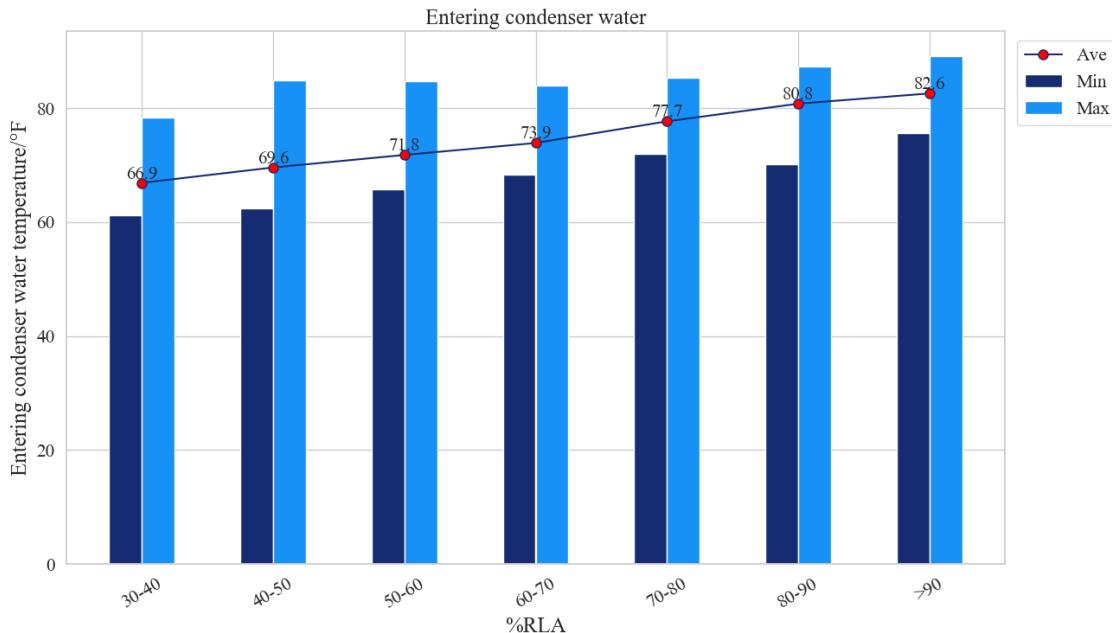
There are no alarms during this period.

The analysis result show that setpoint not meeting **1%** of time.

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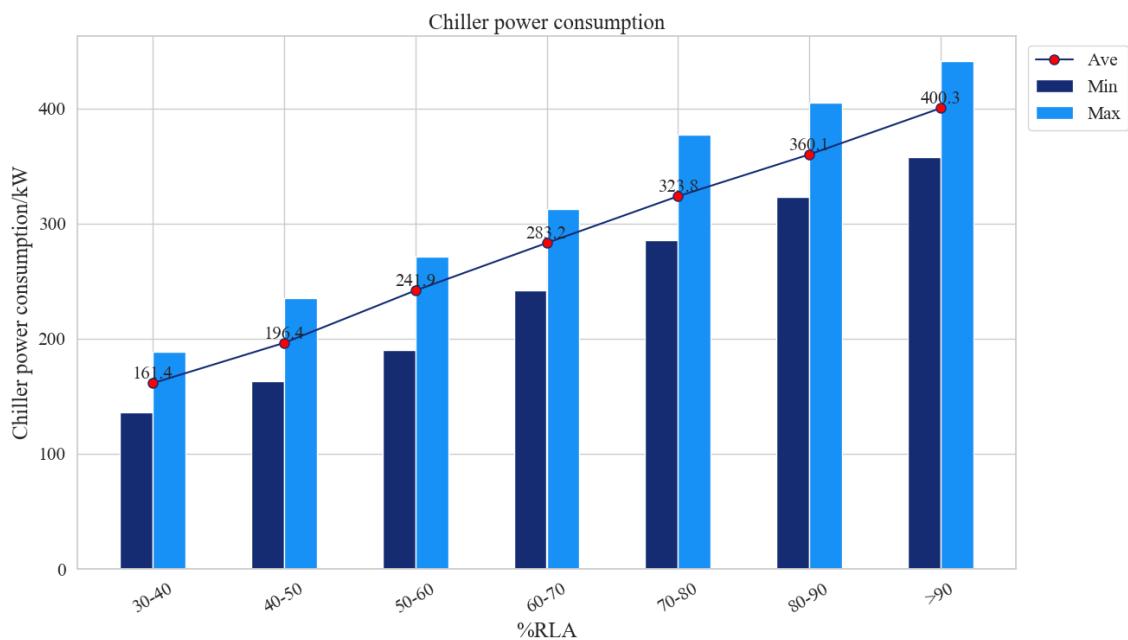
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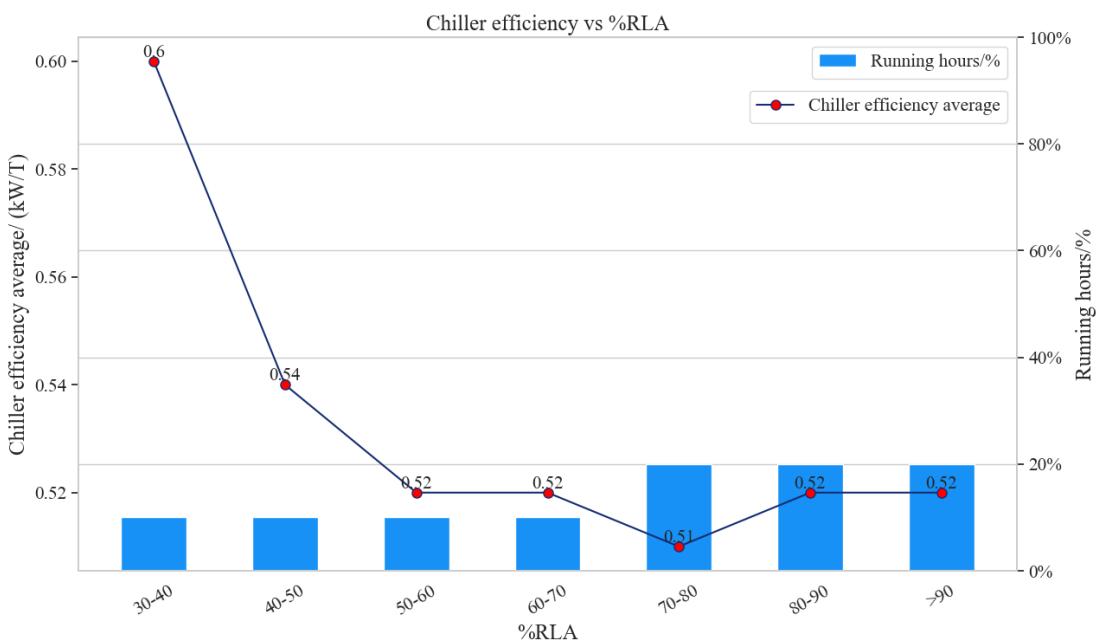
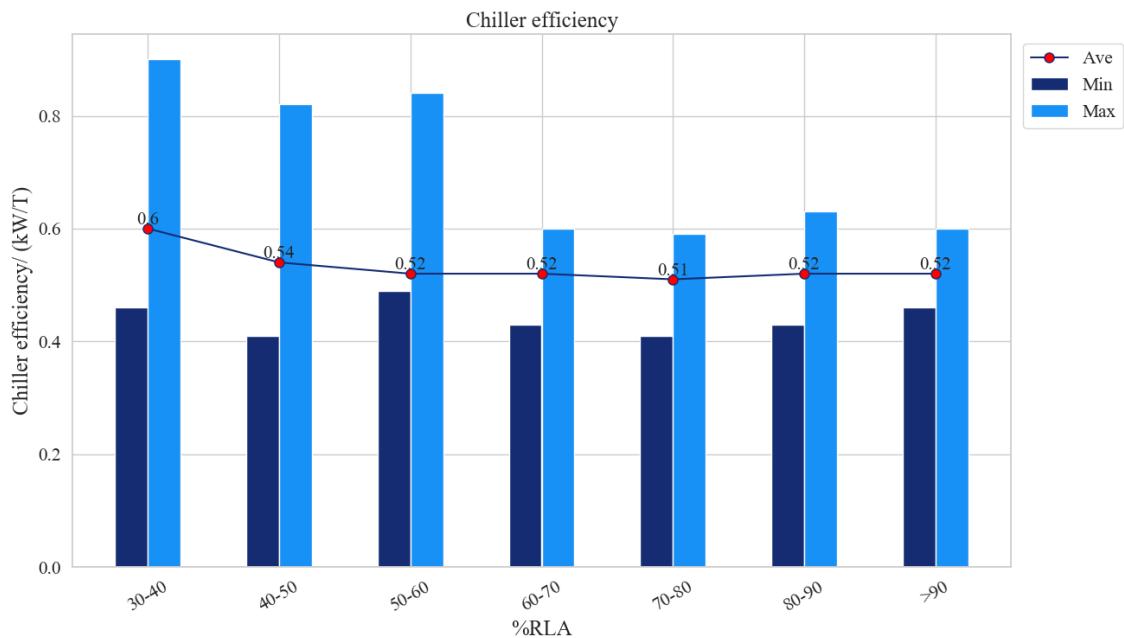
Comments

The Average Cooler supply water temperature is between 40.5 to 49.3 (°F) and the average Condenser entering water temperature is between 66.9 to 82.6 (°F).

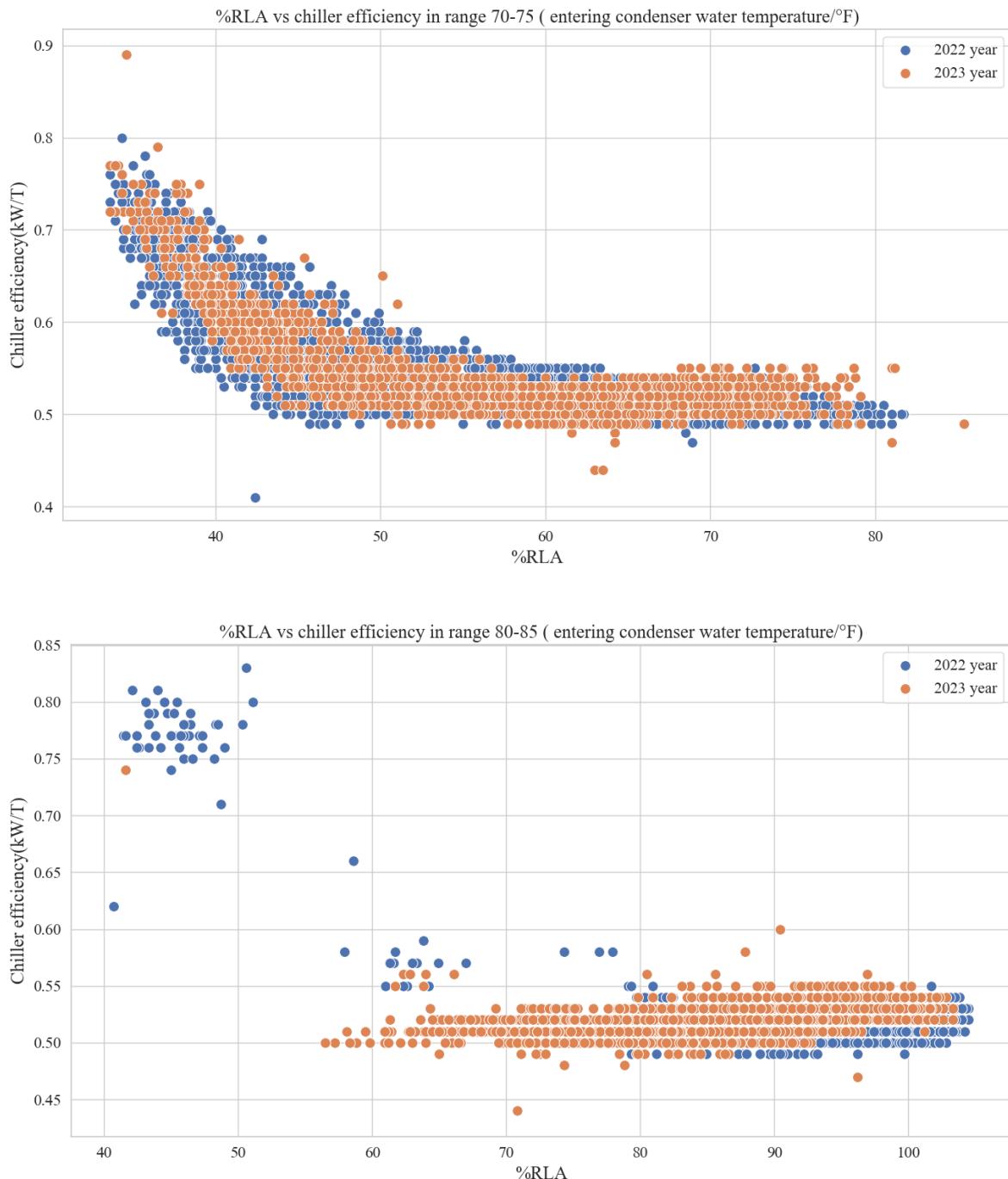
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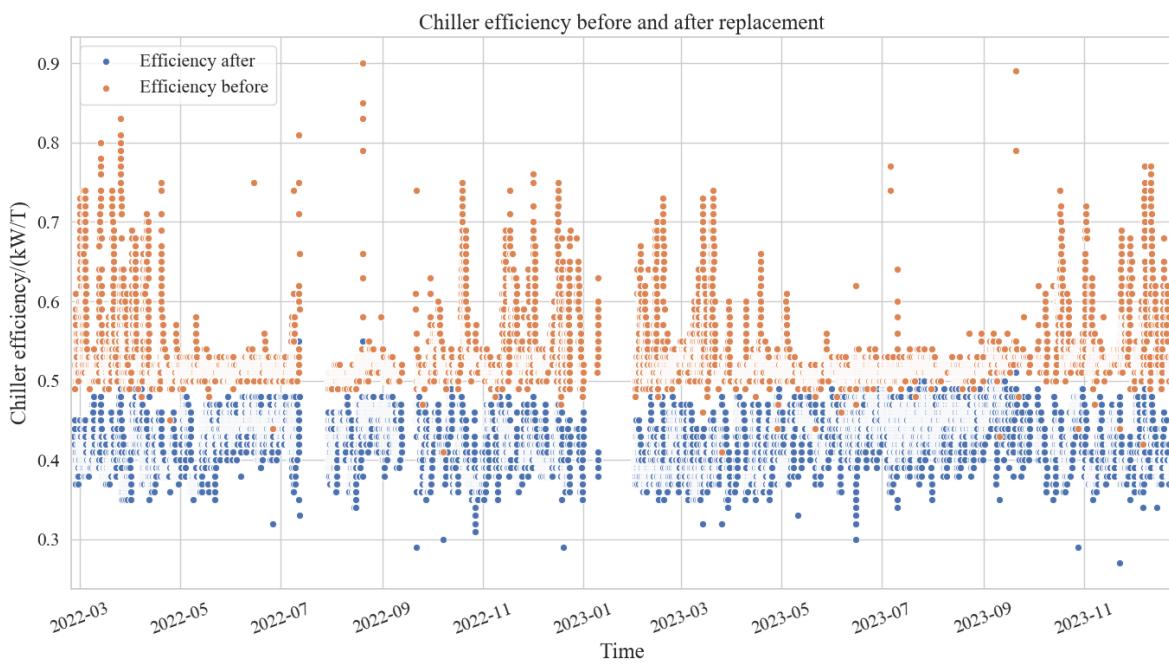
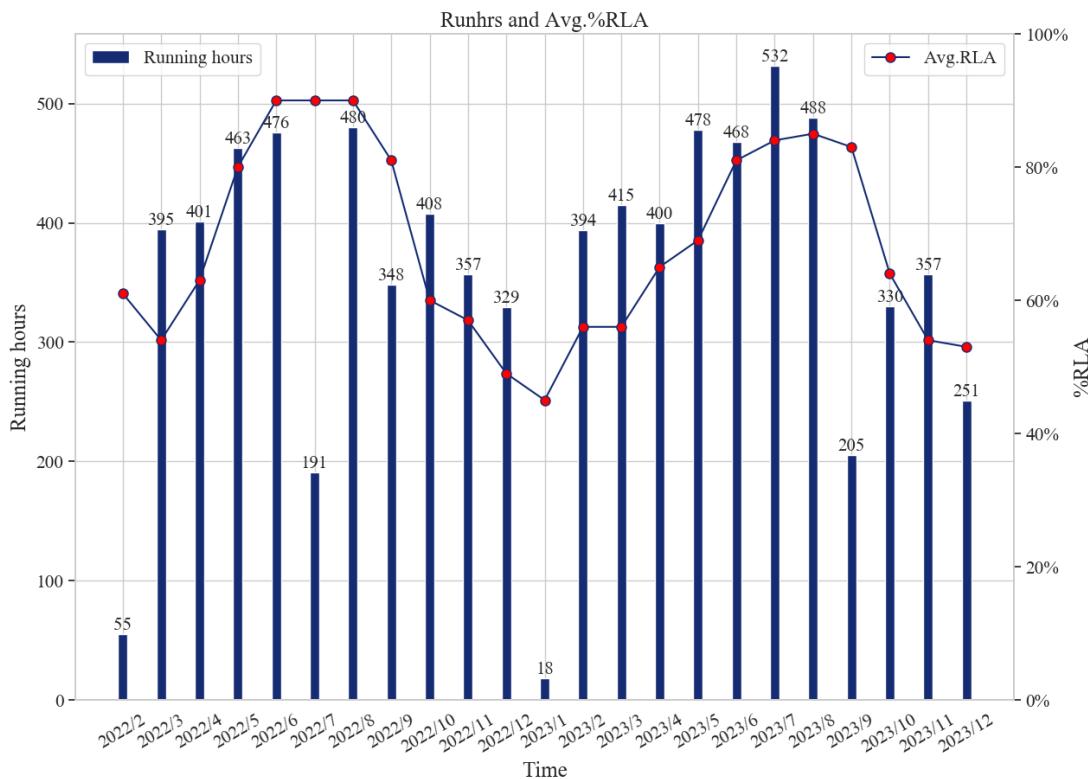
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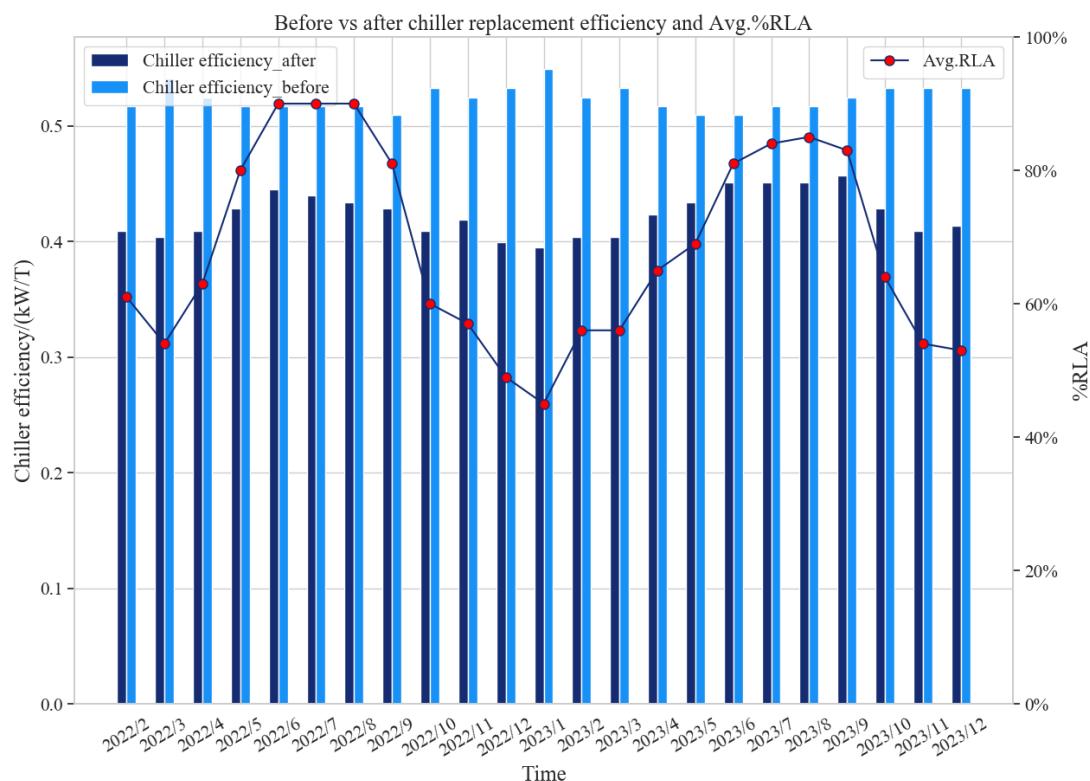
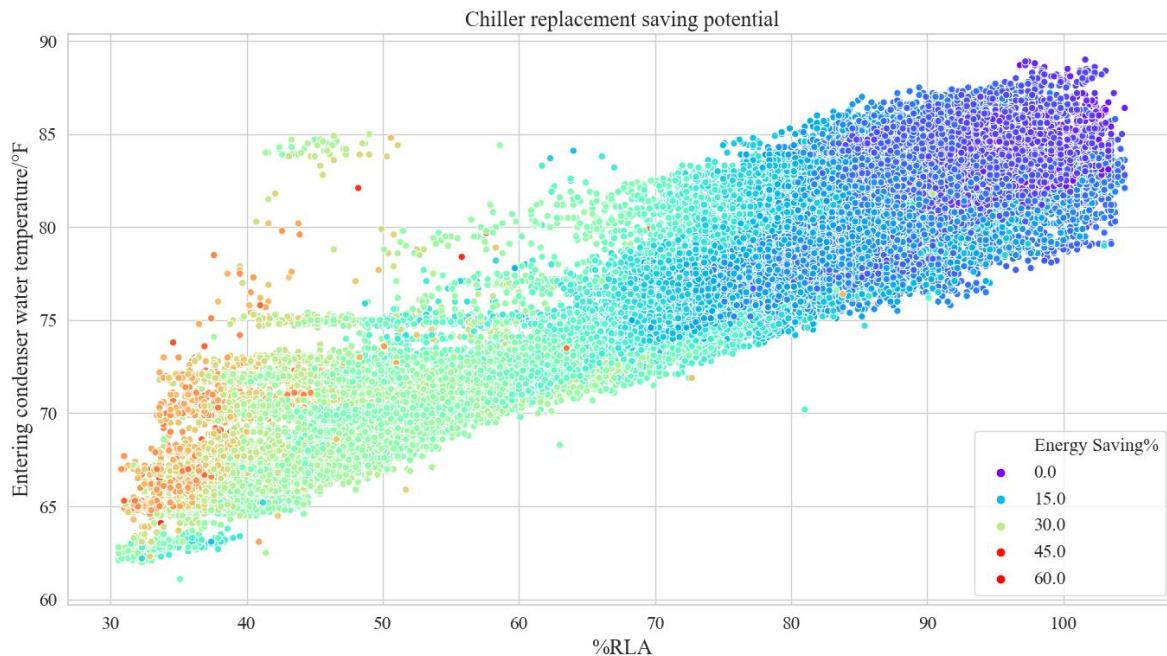
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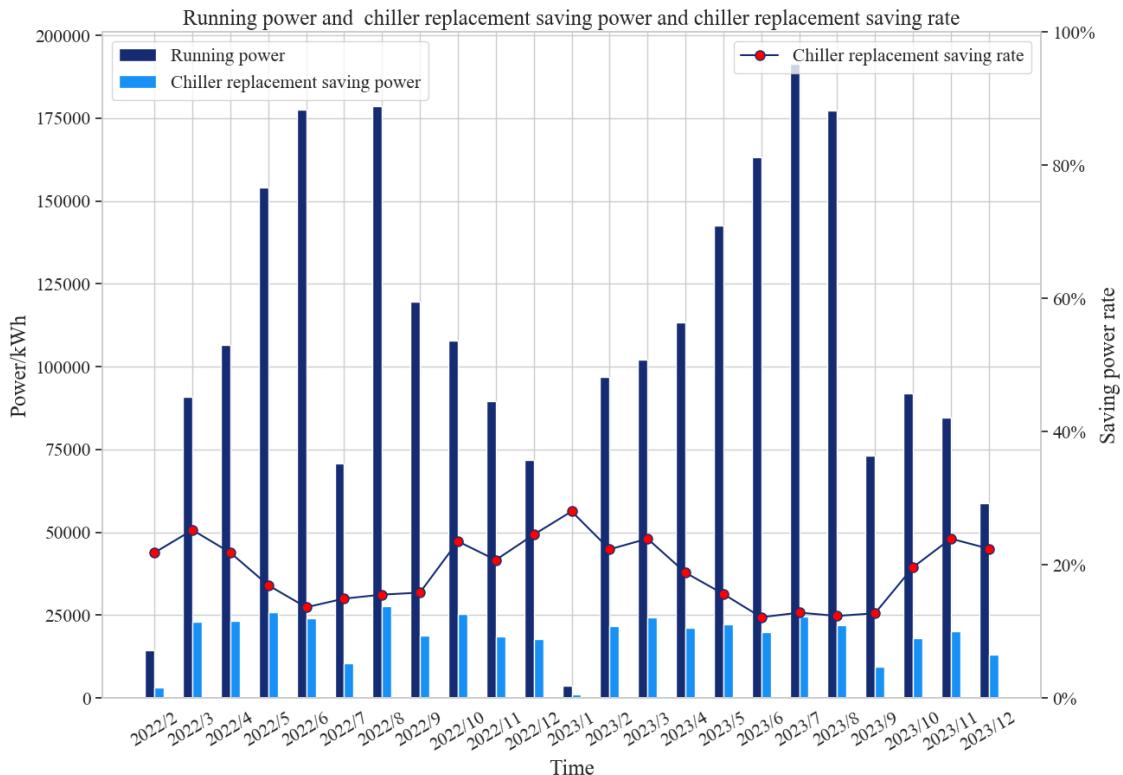
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Chiller Sub System Health

Chiller #	Condenser Health (Good/Stage of Degradation)	Evaporator Health (Good/Stage of Degradation)	Compressor Performance (Good/Stage of Degradation)	Ref leak (Good/Stage of Degradation)	Condenser Water Flow Issue (Yes/No)	Evaporator Water Flow Issue (Yes/No)
4415Q24810						

S1	No action required
S2	Plan to clean/fix
S3	Clean/Fix immediately
S4	-

Summary

Energy Efficiency Improve	18%
Energy Savings	435,114 kWh
Energy Savings/per year	237,394 kWh
Investment pay-back period	9.7 Years