



Chiller Replacement Report



Device Information

Chiller Number	2511Q20862
Location Name	SHERATON SUITES COUNTRY CLUB PLAZA-770 W 47th St
Location City	Kansas City
Postal Code	64112-1802
Site Address	770 W 47th St, Kansas City, MO
Time-zone	America/Chicago
Year of Manufacturing (Age)	2011(13 Years)
Model Number	19XRV3130266BHH64-
Report Duration	2022-01-06 ~ 2023-12-24
Chiller Run Hours	33,388



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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 **2511Q20862** was evaluated for Chiller Replacement Analysis. Further Analysis is performed from the real time data from **2022-01-06 to 2023-12-24**. The design efficiency of current chiller is **0.63 kW/T**. The overall efficiency of this chiller is **0.5 kW/T**. Replacing this with a Carrier Aqua Series Water Cooled Chillers can improve the overall efficiency to **0.4 kW/T**. This replacement can improve the chiller efficiency by **20%**. The chiller is running at low loads (<60% RLA) for **78%** during the analysis period and this replacement can enhance design integrated part-load values (IPLV) to as low as **0.39 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.



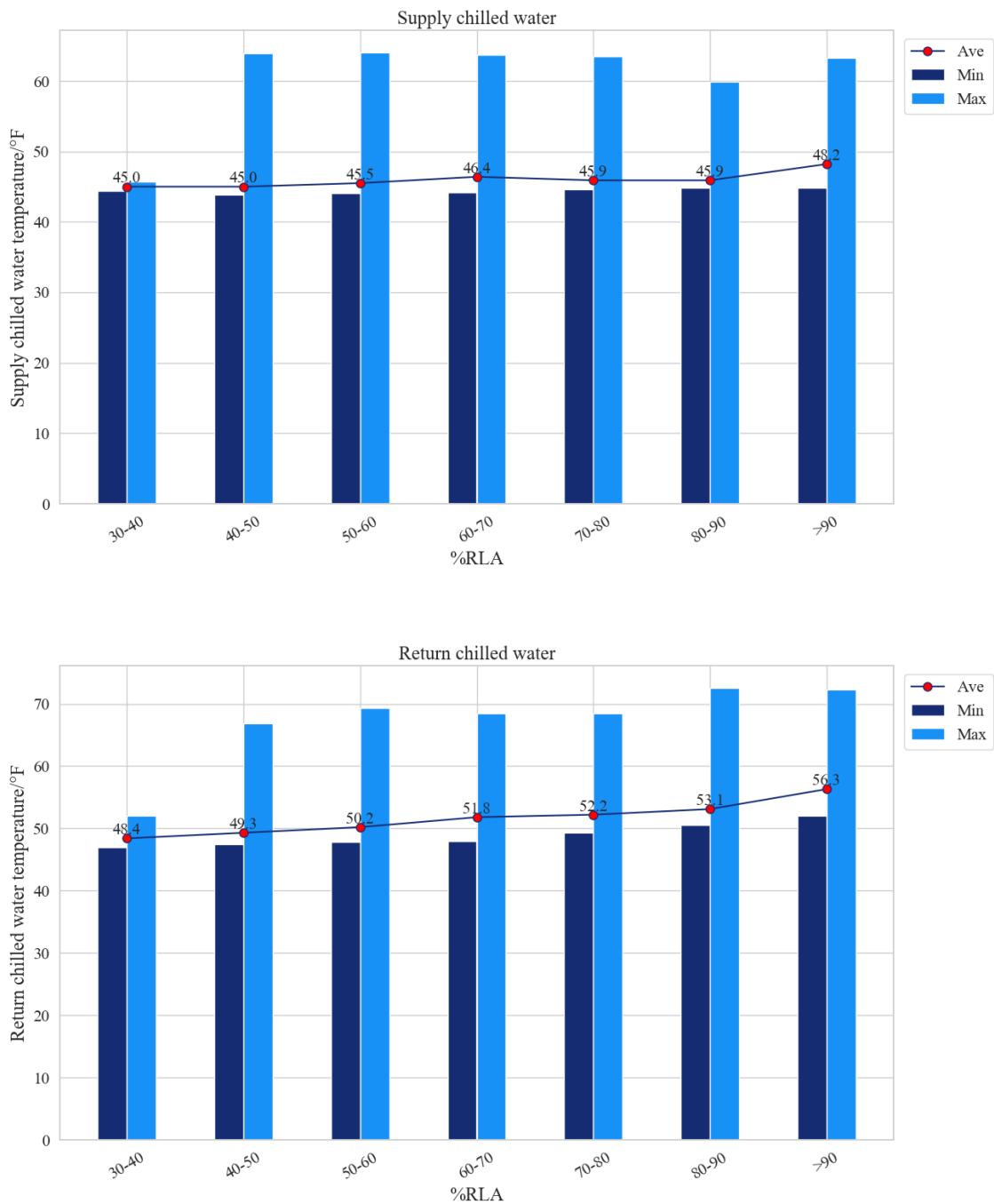
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Alarm/Setpoint Analysis

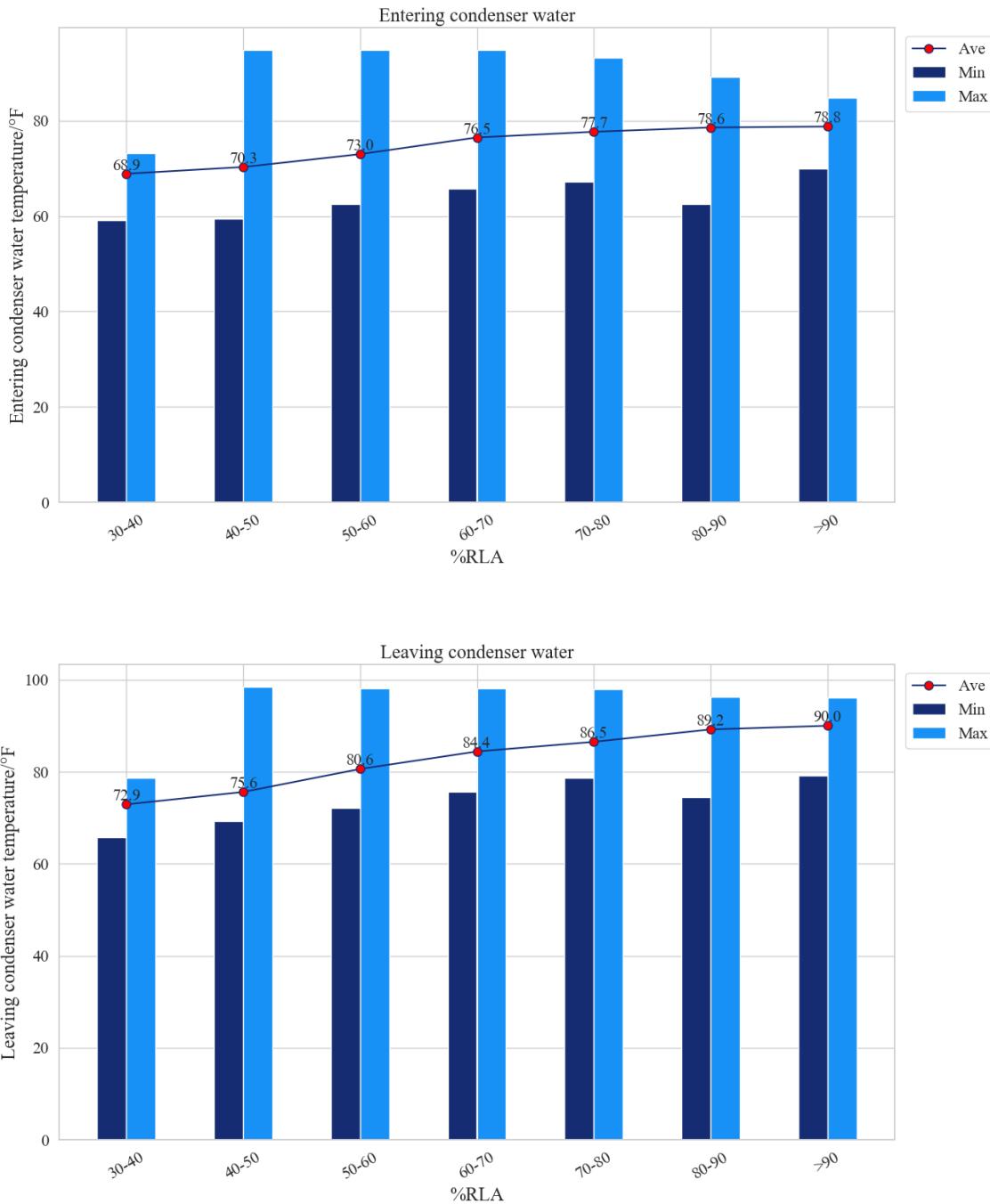
There are no alarms during this period.

The analysis result show that setpoint not meeting **6%** of time.

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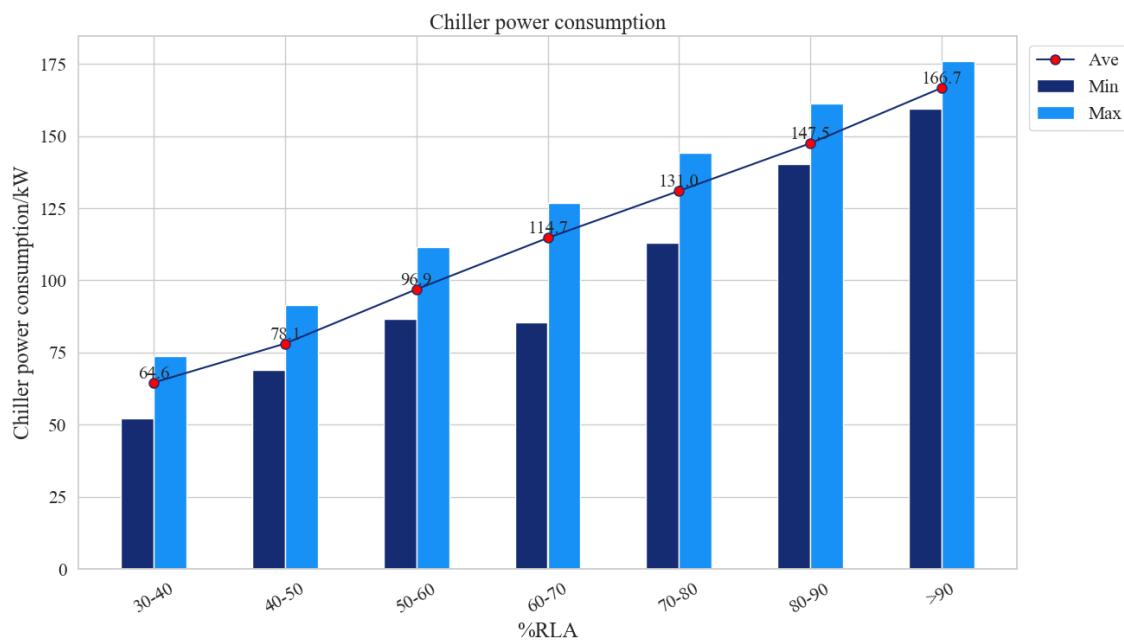
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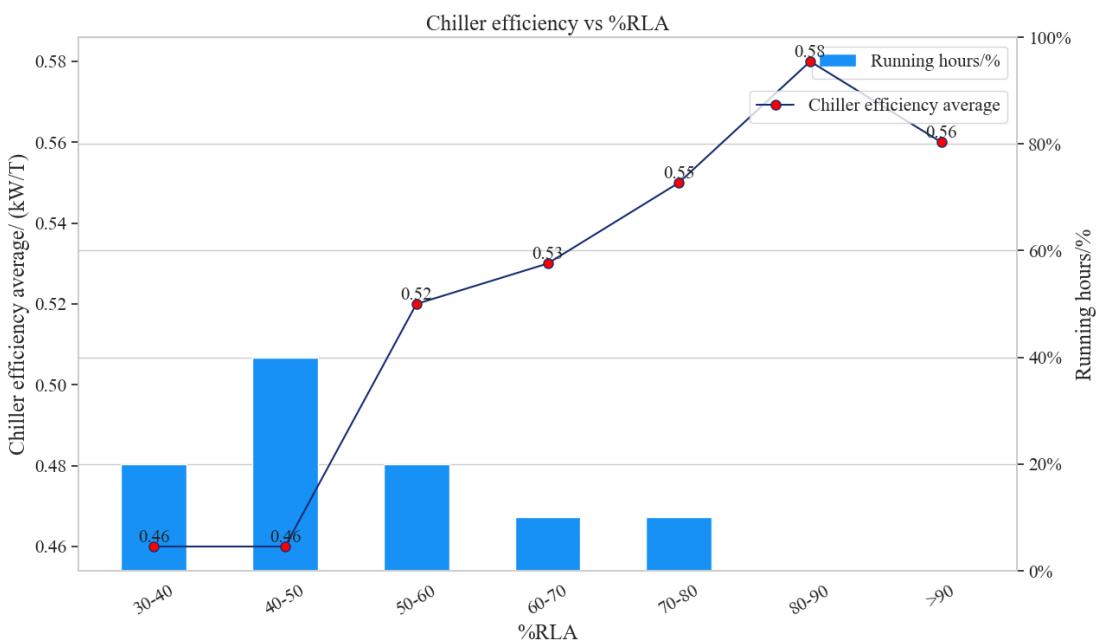
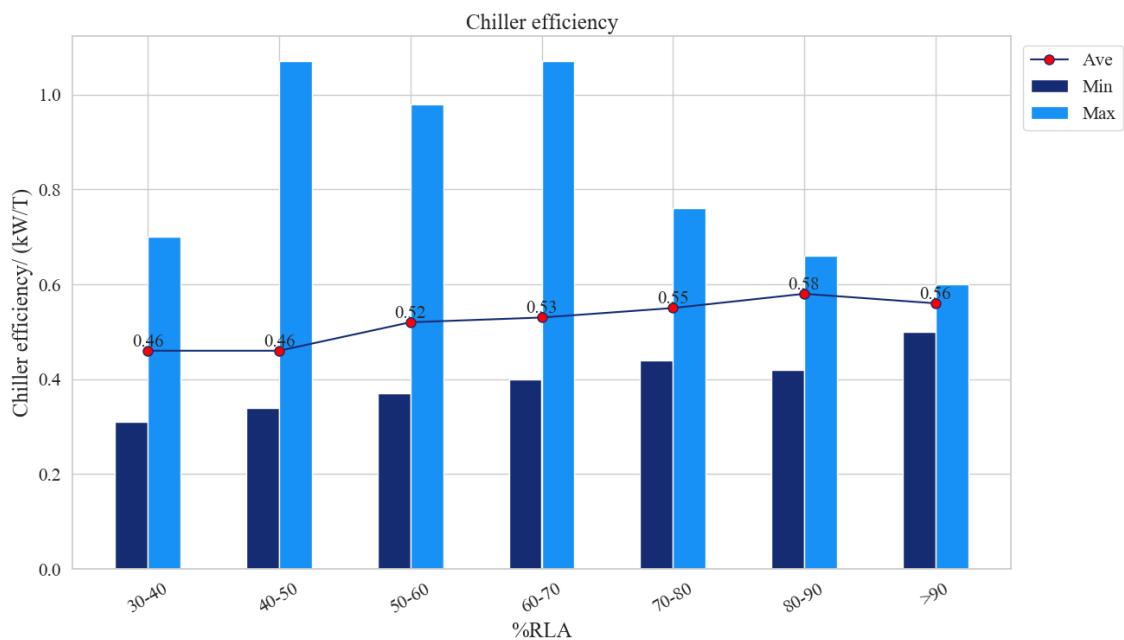
Comments

The Average Cooler supply water temperature is between 45 to 48.2 (°F) and the average Condenser entering water temperature is between 68.9 to 78.8 (°F).

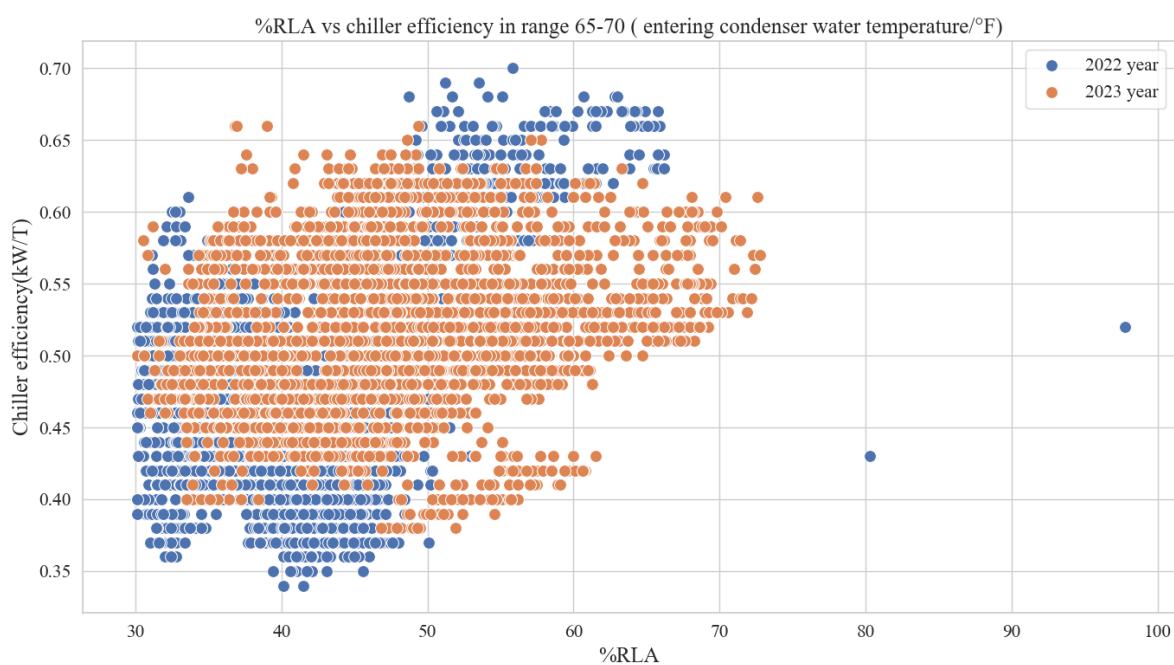
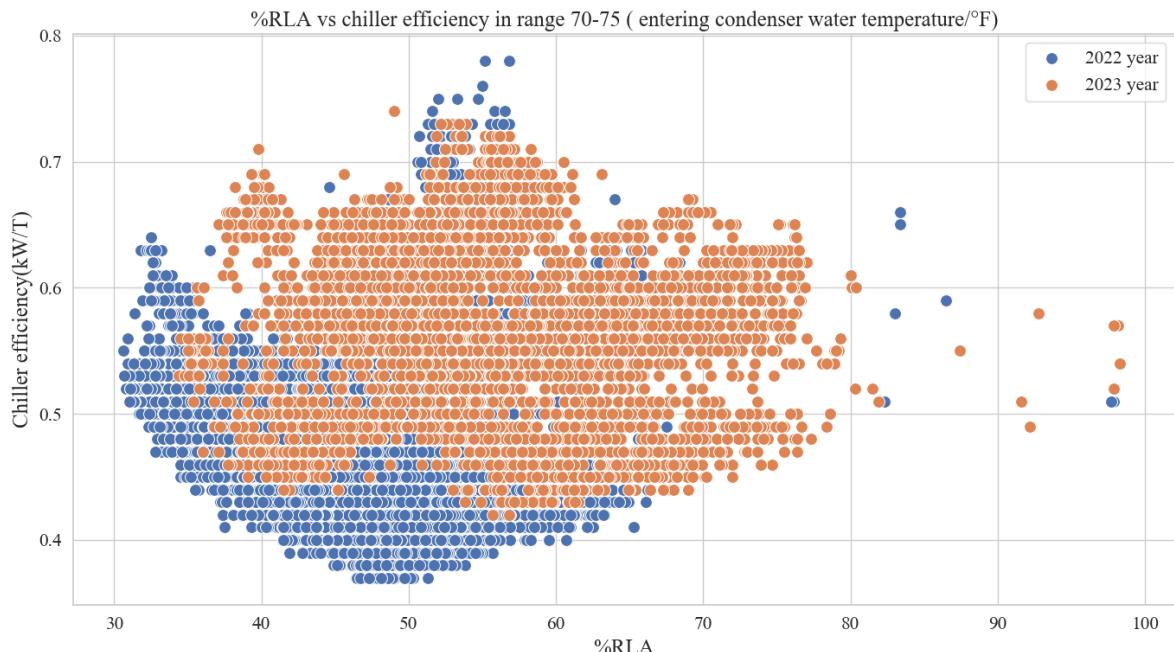
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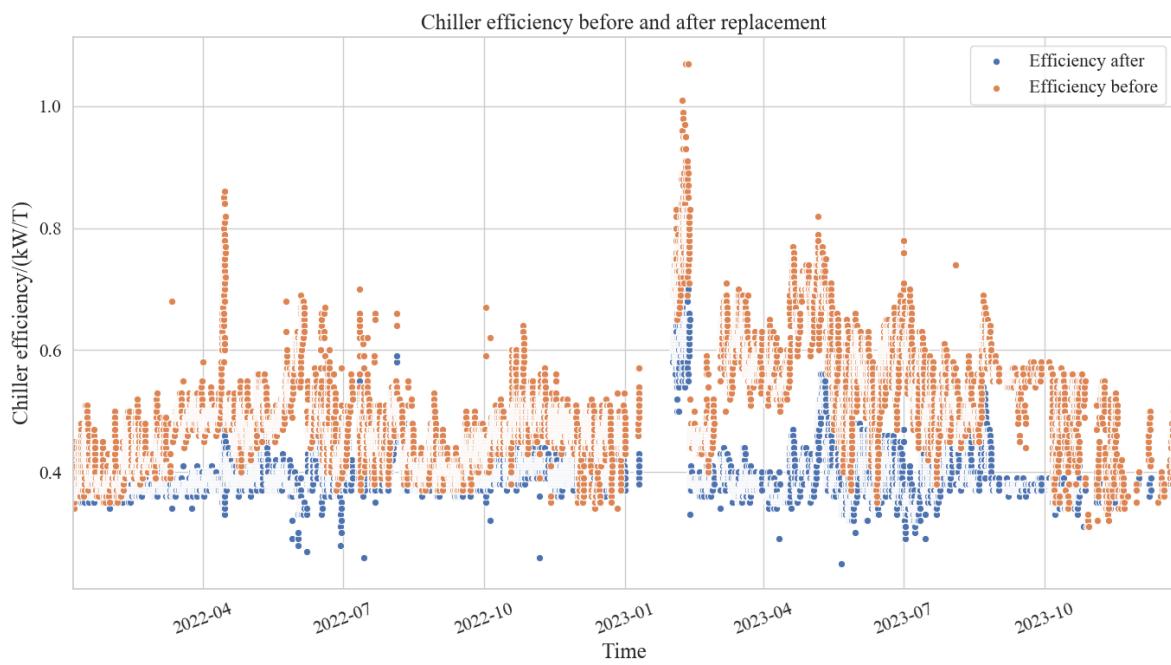
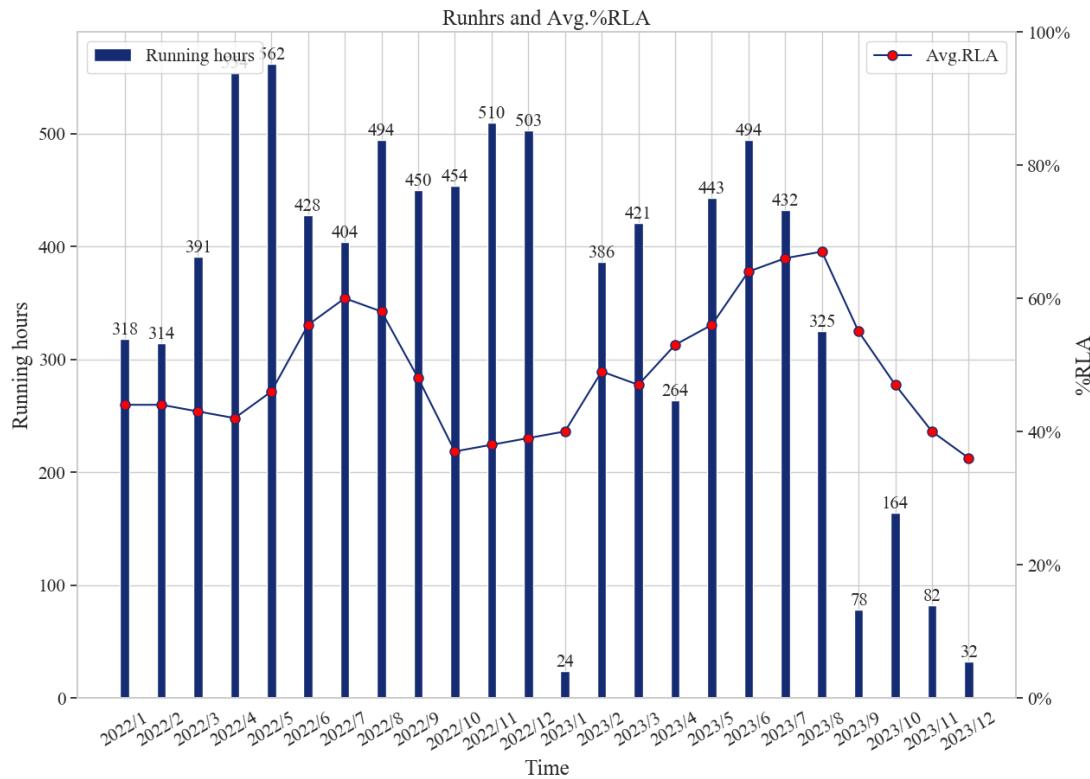
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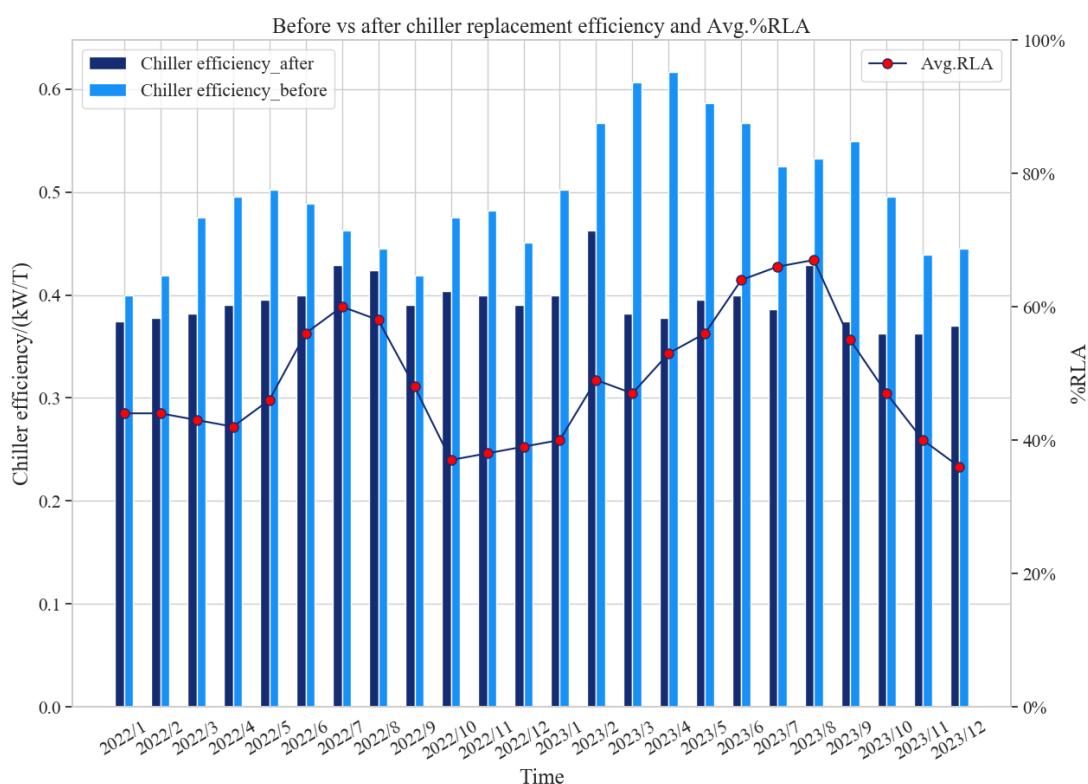
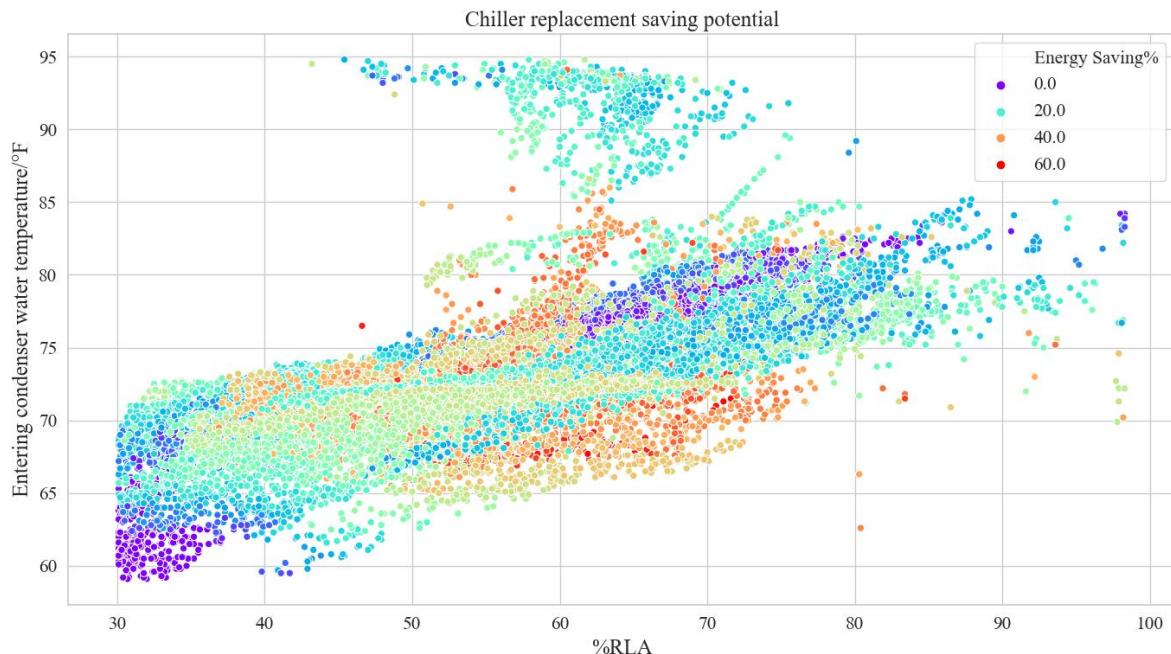
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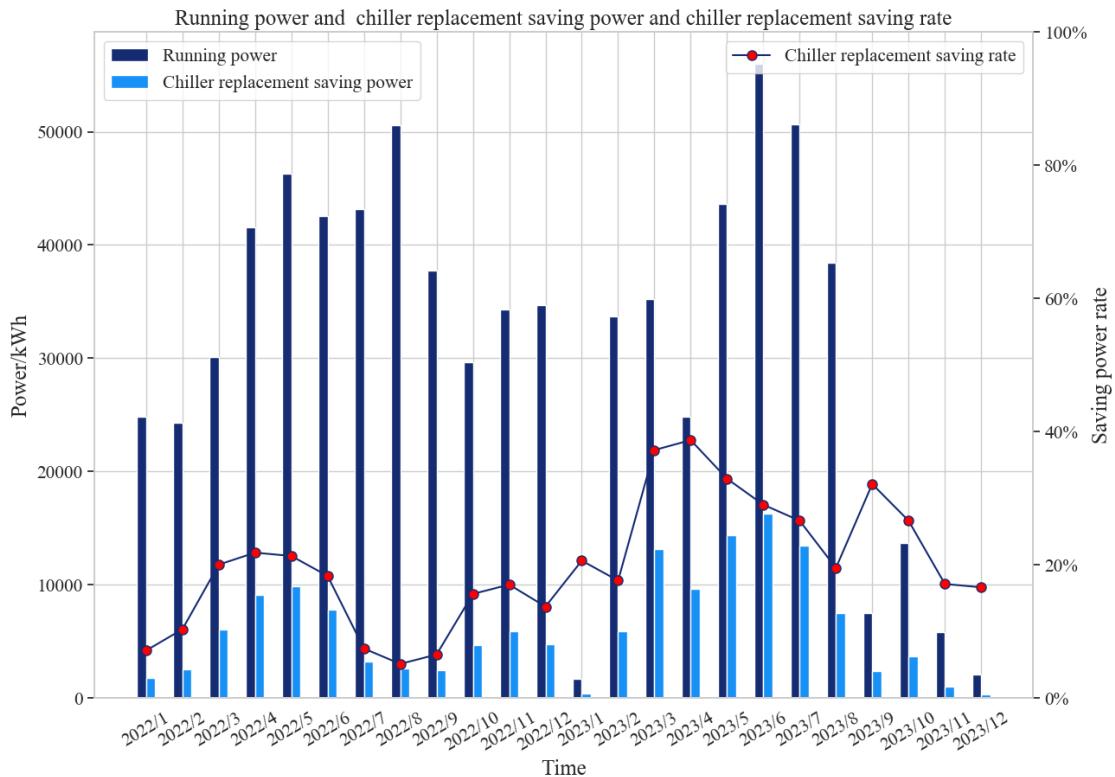
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Chiller Sub System Health

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)
2511Q20862	S2					

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

Summary

Energy Efficiency Improve	20%
Energy Savings	148,400 kWh
Energy Savings/per year	75,545 kWh
Investment pay-back period	9.9 Years