HYATT PLACE PORTLAND, ME

"We are proud to be the first hotel in the United States operating with YANMAR mCHP. The installed 10 kW system has lived up to its expected performance and savings, and has provided our facility with seamless operation." - Hyatt Place Hotel

Project Overview

The Hyatt Place Hotel in Portland, Maine is a 130-room hotel, which opened in 2014. In collaboration with Sparhawk Group, a Maine based engineering firm, YANMAR installed a 10kW natural gas cogeneration unit on the roof of the hotel. Other green features of the hotel include in-unit occupancy and temperature controls, ventilation air heat recovery, LED lighting and high efficiency boilers and hot water heaters.

Reason for Choosing YANMAR

Sparhawk Group analyzed several sites and projects that had a need for large, year-round domestic hot water loads that could use the heat produced by the CHP unit. However, the Hyatt Hotel was selected after considering multiple factors across seven different potential sites.

YANMAR mCHP was chosen because the YANMAR name is well known for quality and reliability in the marine industry, and Portland is a major commercial fishing, recreational boating and cruise ship destination.

The YANMAR mCHP solution was also the best supported option out of all the potential suppliers, and unit features such as quiet operation, outdoor installation packages, built-in load balancing and a waste heat radiator helped convince the Hyatt and engineering firm to design it in.

The 10kW unit now provides a portion of the domestic hot water and power to the hotel, and is able to run at full capacity by storing water in a preheat tank. Once the preheat tank is full, both that tank and primary hot water heating tanks are superheated overnight to help meet peak morning hour demands.

About YANMAR America Energy Systems

YANMAR America Energy Systems in the North, Central and South American headquarters for the company's Variable Refrigerant Flow and Combined Heat and Power systems. Our team and products are focused on sustainability, reliability, and efficiency.

YANMAR America - YANMAR-ES.com
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GRESHAM PLACE
KITCHENER, ON

QUICK FACTS

APPLICATION: Hotel **LOCATION:** Portland, ME **COMMISSIONING DATE:** April 2014
PRODUCT INSTALLED: CP10WN-SN **RESULTS:** High electrical efficiency (99.75%) / High heat output efficiency year-round (96.5%) / Quiet operation: 56 dB(A) at 3 ft. / Consistently reliable operation

RESULTS

• Overall, the CP10WN's operating efficiency (heat + electricity) is high (98% average) because the mCHP system's primary purpose in this application is to provide heat recovery to the facility with generating electricity as the secondary purpose.

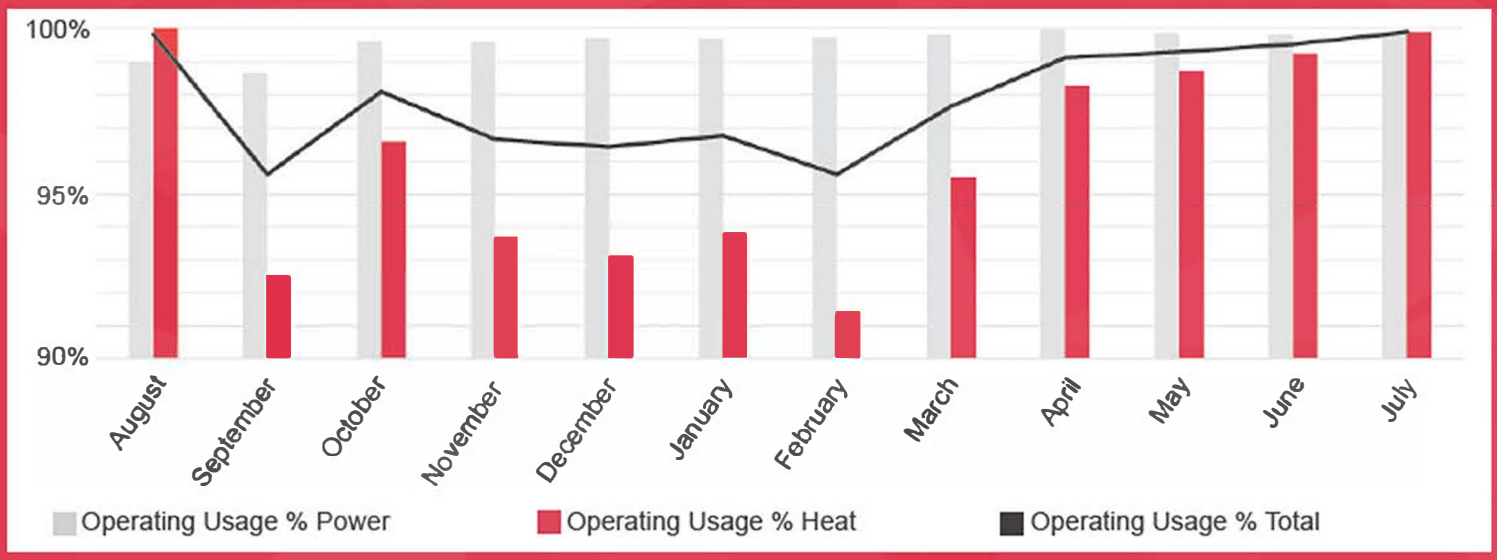
• The CP10WN's heat output efficiency (96% average) is high throughout the year, even during the summer, due to high and consistent thermal demand from the hotel building.

• The unit provides 8% of the building's electricity and 30% of the building's heat requirements year-round.

CONCLUSION

The project successfully demonstrates the application of a YANMAR mCHP in a hotel. The unit has lived up to its promise of high heat and electrical efficiency during its first year of operation due to a well-designed project application.

YANMAR mCHP Energy Utilization Ratio - August 2014 through July 2015
(Actual Output/Maximum Potential Output)



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