

Sustainability Case Study

NEXA HELPS HOTEL SAVE \$8K PER YEAR IN ENERGY COSTS

Context

A full-service, upscale hotel partnered with Nexa to monitor the property's hot water system with Nexa's cutting-edge temperature, pressure, and leak monitoring technologies.

The hotel's Director of Engineering installed Nexa's sensors to provide monitoring and proactive management of his plumbing system to ensure guest comfort, mitigate water-related health and safety risks, and optimize energy use.

Nexa's system map (Figure 1 below) allowed the hotel team to visualize and monitor their plumbing system.

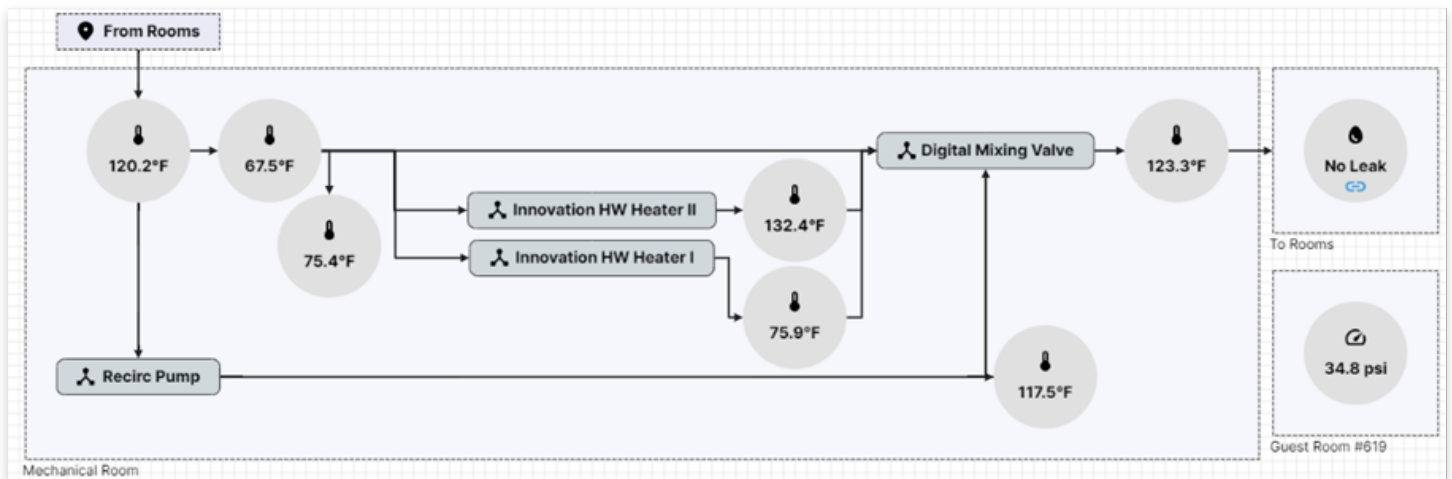


FIGURE 1 – NEXA'S SYSTEM MAP OF THE PROPERTY'S PLUMBING SYSTEM

Data

Nexa detected rapid temperature fluctuations at the hotel and alerted the hotel staff of the situation.

Nexa sensors were deployed throughout the facility to collect real-time temperature, leak, and pressure data. Shortly after installation, a Nexa temperature sensor on the cold-water supply line began detecting rapid temperature fluctuations, triggering alerts for the hotel staff and Nexa team.

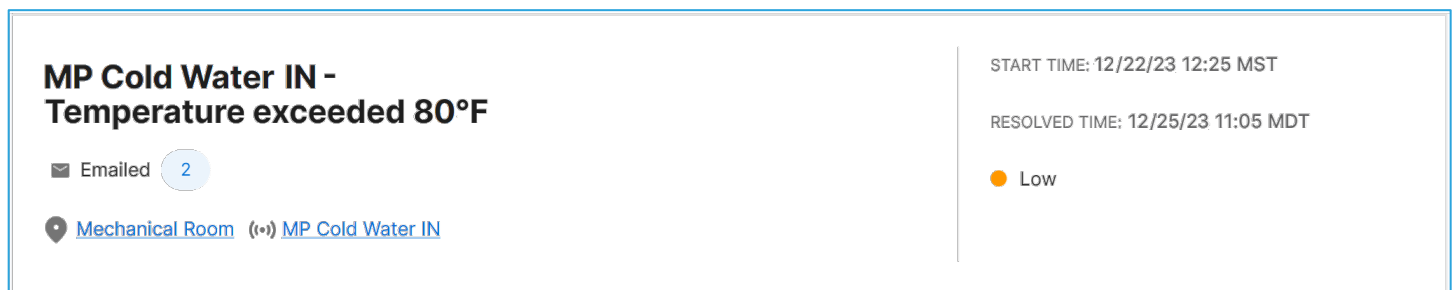


FIGURE 2 – FLUCTUATIONS IN THE COLD-WATER TEMPERATURE TRIGGERED ALERTS IN NEXA

Insights

The Nexa customer success team pinpointed the root cause of the issue to a faulty check valve.

Using Nexa's analytics data and system map, the Nexa customer success team was able to identify the root cause of the issue: A in-line swing check valve in the mechanical required maintenance due to fouling, allowing hot water to seep into the cold-water line. As a result, the hotel's water system was not properly balanced, causing energy loss as cold water had to be continuously re-chilled.

Action

In response to Nexa's insights, the hotel staff took proactive measures to optimize system performance, and promptly repaired the poor-performing check valve.

These actions stabilized cold-water temperatures in the mechanical room (Figure 2 below) and reduced the excess energy consumption from re-chilling the cold-water line.

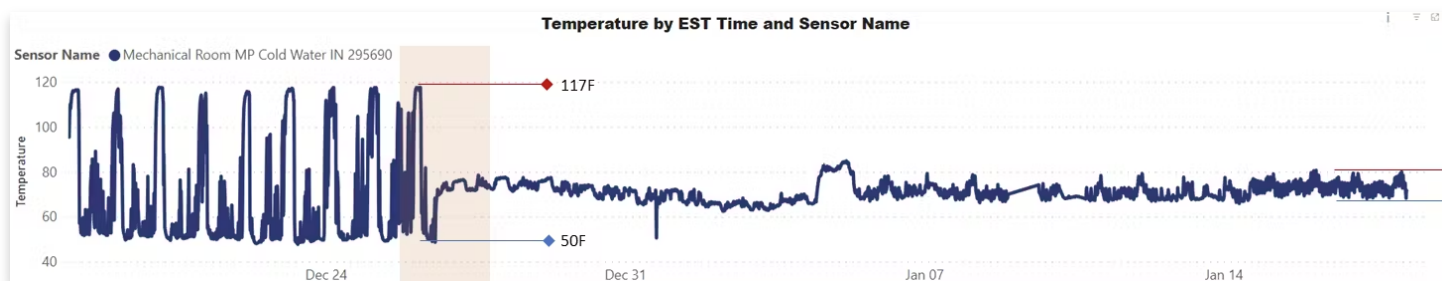


FIGURE 3 – NEXA'S ANALYTICS SHOW SIGNIFICANT TEMPERATURE FLUCTUATIONS DURING DECEMBER ON THE COLD-WATER SUPPLY LINE. THE HOTEL TEAM REPAIRED THE CHECK VALVE IN LATE DECEMBER, AND THE TEMPERATURE READINGS BECAME SIGNIFICANTLY MORE STABLE AFTERWARDS.

Value

By identifying and resolving this issue, Nexa was able to help the hotel save over \$8,000 in annual savings through reduced BTU losses alone

Nexa's ability to identify previously unnoticed issues provided the hotel staff with peace of mind, ensuring rapid resolution before problems could escalate and compound.

Ask how Nexa can assist you in reducing your energy costs