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## Case Study – The Verizon Hotel of Basking Ridge

EDUCATION / HEALTH CARE / LODGING / GOVERNMENT / OFFICE BUILDING / RETAIL / SPECIAL



**Leading-Edge Chiller Design Delivers High Efficiency and Qualifies for Compelling Utility Rebates.**

## Carrier AquaForce® 30XV Chillers Position Verizon Hotel for Utility Rebates and Years of Efficient, Reliable Performance

### OBJECTIVES:

Verizon was experiencing inadequate comfort cooling from two existing air-cooled chillers and escalating service costs. They called on Carrier to propose a solution that would provide the following:

- Exceptional efficiency to reduce energy consumption
- High reliability to help reduce escalating service and repair costs
- Quick delivery and installation
- Smooth and quiet operation
- No service interruption

### SOLUTION:

Carrier provided a turnkey installation that included two new 30XV325 AquaForce® air-cooled screw chillers — high-efficiency units that can provide greater than 21.0 IPLV and wirelessly stream operating data to the cloud via Carrier® SMART Service to ensure optimal performance and uptime. With its quiet, reliable, and highly efficient operation, the 30XV chiller will help save on both utility and service costs over time. Additionally, the product qualified for an \$87,000 per chiller utility rebate that provided a significant reduction in first costs. As this was a turnkey solution, Carrier also coordinated Verizon-owned mobile chillers (also purchased through Carrier) to provide temporary cooling for the hotel while replacing the old chillers, and provided start-up and commissioning for the two new AquaForce 30XV's.



*Two 325 ton (1143kW) Carrier AquaForce® 30XV chillers qualified for a \$174,000 utility rebate from the New Jersey SmartStart Buildings® rebate program, significantly reducing first costs on these reliable, high-efficiency chillers at The Verizon Hotel of Basking Ridge.*



# Case Study – The Verizon Hotel of Basking Ridge

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## SYNOPSIS:

The Verizon Hotel of Basking Ridge is a 130,000ft<sup>2</sup> (12077m<sup>2</sup>) hotel and conference facility with 171 guest rooms, 21,000ft<sup>2</sup> (1951m<sup>2</sup>) of meeting space, a restaurant and bar. The property is located directly across the street from the Verizon headquarters in Basking Ridge, NJ. In December 2016, Verizon acquired the facility to provide convenient accommodations for visiting employees and guests. At the time of purchase, the building was experiencing inadequate comfort cooling and escalating service costs from the two original chillers. Nicholas Ramos, Executive Director, Verizon Global Real Estate Property Operations, immediately sought to replace the chiller units.

Ramos called Carrier to request a chiller solution that would provide high-efficiency comfort cooling for the hotel; operate quietly to preserve a pleasant atmosphere for guests; could be delivered immediately; and, would reduce service costs. In addition, Ramos wanted to maximize the cooling tonnage, given the available rooftop space.

Carrier presented Verizon with the new Carrier AquaForce<sup>®</sup> 30XV air-cooled screw chiller, a high-efficiency unit that can provide greater than 21.0 IPLV. The Carrier AquaForce 30XV is an air-cooled, variable-speed screw chiller that provides industry-leading efficiency in a smaller footprint, which makes it suitable for replacing most older equipment. The fully air-cooled variable frequency drives enable the chillers to operate efficiently at a greater range of outdoor air temperatures, and the user-friendly control with color touchscreen display is self-optimizing, so the 30XV runs at optimum performance in any given set of conditions.

Carrier's chiller comparative analysis estimated a 29 percent gain in efficiency (i.e. lower operating costs) with the higher efficiency 30XV. Each chiller qualified for a utility rebate of \$87,000 from the New Jersey Board of Public Utilities' SmartStart Buildings<sup>®</sup> program due to the exceptional efficiency. The chiller rebates significantly reduced the first costs of the overall project.

To prepare for the installation, Carrier integrated the hotel's chilled water system with Verizon's 53-foot temporary cooling trailer — containing two Carrier 30RB units — which Verizon had purchased to provide short-term cooling for projects such as this. The temporary chillers provided seamless comfort cooling for the hotel while the Carrier team removed the original chillers and installed the two AquaForce 30XV chillers.

Nicholas Ramos said, "Everything went well with the installation. Carrier worked with my project manager to ensure that. The new chillers are a win-win for Verizon, with the utility rebate and the projected savings on electricity."

As an added benefit, each 30XV chiller is Carrier<sup>®</sup> SMART Service enabled which will provide wireless data transmission of key operating data. This remote visibility into the system's performance will ensure maximum uptime via faster problem detection and resolution and reduced energy costs through performance optimization.

The new Carrier chillers are now in service at The Verizon Hotel of Basking Ridge, providing guests and employees with a cool and quiet atmosphere, and Verizon facilities staff with the lowest cost of cooling to enhance future profitability.

*"The new chillers are a win-win for Verizon, with the utility rebate and the projected savings on electricity."*

Nicholas Ramos,  
Executive Director,  
Verizon Global Real Estate  
Property Operations

## Project Summary

**Location:** Basking Ridge, NJ

**Project Type:** Modernization

**Building Size:** c. 130,000 ft<sup>2</sup> (12077m<sup>2</sup>),  
21,000ft<sup>2</sup> (1951m<sup>2</sup>) of meeting space;  
171 guest rooms

**Built:** 1992

**Facility Usage:** Hospitality

**Objectives:** Provide exceptional efficiency to reduce energy consumption; be highly reliable to help reduce escalating service and repair costs; deliver and install quickly, and operate quietly and smoothly.

**Equipment:** Two Carrier AquaForce<sup>®</sup> 30XV air-cooled, variable speed screw chillers

**Total Cooling Tons:** 650 tons (2286kW)

**Major Decision Drivers:** First cost of new chillers in light of utility rebate; projected high efficiency and reduced utility and service costs.

**Unique Features:** Temporary cooling during installation provided by existing Verizon mobile chillers; Carrier<sup>®</sup> SMART Service

**Installation Date:** 2017