

Mohegan Sun: A perfect balance of energy savings and a superior indoor environment for guests

October 25, 2012 - Green Buildings

There are a million ways to shine at Mohegan Sun with fine dining, premier hotel accommodations, live entertainment, shopping and three world-class casinos. Mohegan Sun employees work hard behind the scenes to ensure that it is a comfortable environment for guests 24 hours a day, 7 days a week. The Mohegan Tribe is also sensitive to environmental concerns and has implemented several sustainability initiatives over the year to reduce energy, eliminate waste and recycle responsibly. When it came to their goal of reducing energy there was a unique challenge presented- how can Mohegan Sun reduce energy use while not sacrificing the indoor environmental quality for guests? One way that Mohegan Sun found to achieve this was to implement demand control ventilation (DCV). During busy times, the ventilation is increased to provide more fresh air to guests and when occupancy declines, ventilation is reduced. Aircuity takes this concept to a whole new level by sensing not only CO2, but particulates and total volatile organic compounds as well. "We want to make sure we are providing the optimal amount of fresh air based on everything that's in the air, not just based on the number of people," said Daniel Webster, chief engineer at Mohegan Sun. "Aircuity's approach makes it cost effective for us to measure many different critical parameters within the casino and make smart decisions about ventilation control." Aircuity Advisor Services takes the ocean of data collected by the OptiNet system and transforms it into actionable data that can be used to gain insight into any issues reported in the facility. The time period during which an issue is reported can be isolated and reviewed providing specific information on the nature and severity of the issue. Energy efficiency projects like the one at Mohegan Sun creates the "Greenest Energy of All" -the energy that never gets used. Based on implementing Aircuity in the Casino of the Earth, Mohegan Sun has saved an estimated \$74,000 in heating and cooling expenses over the past year. This savings provides a payback period of 20 months. Mohegan Sun is now expanding this "healthy DCV" into the Casino of the Sky and the Casino of the Wind. Mohegan Sun is a testament to the fact that it is possible to save energy while providing a safe, healthy and comfortable environment for occupants.

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