

EnergyRight® Solutions for Business + Industry

## Energy makeover brings cutting-edge tech to World's Fair Holiday Inn







TVA's EnergyRight® Solutions for Business and Industry (ERSB+I) worked with several partners to help World's Fair Holiday Inn save more than 557,000 kilowatt-hours (kWh) every year. Set in the heart of Tennessee's "Scruffy City," the World's Fair Holiday Inn stands as a reminder of the rich energy history deeply embedded in Knoxville. Not only is Knoxville the headquarters for TVA, but in 1982 it was the home to the World's Fair. The expo's theme was "Energy Turns the World." Thirty-four years later, that theme still rings true. Energy is a highly valued commodity across the world, and Knoxvillians should be proud of the energy saving efforts still occurring right in the heart of their beloved town.

TVA's ERSB+I partnered with Knoxville Utilities Board, the World's Fair Holiday Inn and facility solutions provider Perfection Group Inc., paying nearly \$40,000 in incentives for cutting-edge technology improvements that will save Holiday Inn more than 557,000 kilowatt-hours (kWh) every year. Variable-frequency drives were added to the hotel's pumps and fans, and a new scheduling system was installed that has the capability to look at outdoor air temperature and humidity levels to determine if that air could be pulled into the hotel for use in the AC system. The system also monitors occupancy schedules, checking the hotel's overnight and conference rooms for vacancy, with the ability to turn off

ventilation in rooms that are not being used. In addition, the hotel added carbon dioxide sensors that crank up the AC based on the carbon dioxide levels in the room. With the new upgrade, the system managers are able to log into the system through any mobile device to check on system status. This progressive system performs much like a smart home, but on a large scale for a building. When Knoxville hosted the World's Fair decades ago, this technology was not even a glimmer in the eye of its inventors. However, humanity knew the importance of energy back then and TVA has been working ever since toward a cleaner tomorrow.