

Integrated Energy System At Hilton Garden Inn



**NiSource Energy Technologies
installs first Integrated Energy
System (IES) designed to
optimize the energy building design
for Hotel/Motel industry.**

NiSource Energy Technologies has installed a combined heat and power distributed generation system at the Hilton Garden Inn in Chesterton, Indiana. The installation of this advanced technology is the first step of a larger Department of Energy contract to develop a modular-packaged IES for the hotel/motel segment.

Combined heat and power packages, also referred to as cogeneration systems, provide increased energy and environmental efficiency over traditional electric production and provide customers with energy choice and flexibility. The systems generate heat and electricity simultaneously at the site of use and increase energy efficiency by utilizing the waste heat created by the production of electricity for productive purposes.

The IES, which will generate electricity for the hotel, will initially include three microturbines, heat recovery heat exchangers, and an advanced control system. The waste heat will be utilized to supplement heat for the water supply, spa, and swimming pool, as well as provide space heat for the hotel's common areas. The microturbines, housed in a separate building on the hotel's property, currently generate approximately half of the four-story hotel's average electrical load requirement.

As part of the three-year development process, additional equipment and functions including a fuel cell, solar cells, an absorption chiller, a desiccant unit, a dehumidifier and advanced energy controls will be added to provide the hotel with greater energy efficiency.

NiSource Energy Technologies, a subsidiary of NiSource Inc. (NYSE: NI), markets and sells distributed power generation systems to commercial and small industrial customers. These small, on-site generating systems enhance power quality, improve reliability and operate with or without the local electric utility grid. The company is focused on targeting early adopters of distributed generation technology.