



## DoubleTree Suites – New York

**Client:** American DG Energy

**Completion:** 2014

Hilton's DoubleTree Suites in Times Square, Manhattan, is a 45-story hotel surrounded by theaters, restaurants, shops, and museums. Their mechanical equipment was upgraded to include water-cooled chillers, boilers, ventilation fans, and a cogeneration plant, in a move toward more efficient operations.

Our team conducted a site survey to measure current noise levels and studied the feasibility of replacing existing steam absorbers with a cogeneration plant for the hotel. We reviewed manufacturer's sound data and equipment cut sheets for possible equipment installation including centrifugal electric chillers, boilers, pumps, inverter generator units, and a low roof/deck generator. We analyzed the new equipment's potential environmental noise impact as well as the impact to the spaces within the hotel and made recommendations on adding sound attenuation and vibration isolation to keep noise transmission within required limits.

Our recommendations provided innovative solutions for the hotel's upgrade, retrofit, or replacement requirements that comply with NYC Noise Codes, mitigated noise to nearby buildings, and maintained the integrity and high standards of DoubleTree.