



TWO LIBERTY PLACE Philadelphia, PA

**47% Energy
Reduction!**

Concord Management Services – Rich Energy Solutions

Two Liberty Place is a 57 Story iconic multi-use high rise in downtown Philadelphia. The building consists of retail shopping, an expansive food court, 30 floors of Class A office space - corporate office for Cigna Insurance company, an upscale restaurant and 20+ floors of high-end condominiums. The project qualified for the PECO custom incentive and will receive a significant rebate from their commercial incentive program.

THEY SAID IT COULDN'T BE DONE!

Problem: due to the close proximity of other high rises to the 38th floor cooling tower deck a helicopter lift or crane application was not possible.

Rich Energy Solutions (RES) partnered with **Concord Management Services (CMS)** a large engineering and development firm, to deliver a **turn-key energy retrofit** of the thermal plant located on the 36th-38th floors of the building. The project consisted of replacing 2,000 tons of chillers with new high efficiency mag-bearing chillers, new fiberglass modular cooling towers, upgraded BACnet controls, a 1000 ton plate and frame heat exchanger for free cooling in the winter and a **dynamic chiller plant optimization software package** to completely modulate the chillers, pumps, cooling towers and valves automatically based on demand!

RES and CMS strategized to perform complex rigging analysis with, innovative HVAC and electrical engineering to modularize the plant, so that it could be lifted in pieces through retail spaces and up freight elevators. The construction schedule and cost were within budget and ahead of schedule, providing Two Liberty with significant plant savings that are on par with new construction high rises.

“We are construction specialists combined with leading edge energy engineering, its an unbeatable partnership”, stated David Rich of RES, and Anthony Caucci, P.E. President of Concord.

