

Contract Details

Contract Type:

Design Build, Combined Hot Water and Chilled Water Plant

Summary

Boeing's campus in Huntington Beach, California, was constructed in 1963.

The campus was old, inefficient, and unreliable. The plant was an entirely gas-fired operation, and much of the equipment was in disrepair. There were a total of five gas-driven centrifugal R-11 chillers producing 5,300 tons, as well as three steam-driven chillers with a capacity of 2,500 tons. Although the facility's direct steam load was light, a high-pressure 130-million-British-unit-per-hour steam system was used to indirectly produce high temperature hot water from steam condensate. Ameresco was selected by Boeing in a deal that included a full modernization of the central plant.

The project is now complete and The Boeing Company owns and operates the central plant.



Customer Benefits

The comprehensive plant modernization was carried out while maintaining full delivery capabilities throughout the construction phase. The new, fully automated energy infrastructure greatly improved both efficiency and reliability. In addition, by drastically reducing nitrogen dioxide emissions (from 166,000 to 26,800 pounds per year) and eliminating chlorofluorocarbons refrigerant, Ameresco improved environmental performance at the Huntington Beach campus. Boeing has also gained vitally needed flexibility for future operational requirements.

Services Provided

Ameresco purchased this plant under an interim agreement, and for 4 months operated the existing plant while finalizing terms of the agreement with Boeing. Once the final contract was signed, the entire plant underwent full modernization and conversion to cleaner, more efficient electric operation.

The chillers were replaced with three new premium-efficiency R-123 centrifugal chillers, each approximately 1,833 tons, for full capacity of 5,500 tons. The steam system was removed and replaced by two high temperature hot water generators with total capacity of 56 million British units per hour.

About The Boeing Company

Boeing is the world's leading aerospace company and the largest manufacturer of commercial jetliners and military aircraft combined. Additionally, Boeing designs and manufactures rotorcraft, electronic and defense systems, missiles, satellites, launch vehicles and advanced information and communication systems.

As a major service provider to NASA, Boeing operates the Space Shuttle and International Space Station. The company also provides numerous military and commercial airline support services. Boeing has customers in more than 90 countries around the world and is one of the largest U.S. exporters in terms of sales.

Learn more at www.boeing.com

About Ameresco

Ameresco, Inc. is one of the leading global energy services providers. We deliver long-term customer value, environmental stewardship, and sustainability through energy efficiency services, alternative energy solutions, supply management, and innovative facility renewal strategies. The company has over 650 employees in regional offices throughout North America. Ameresco, Inc. has constructed billions in energy projects throughout the world.

Learn more at www.ameresco.com