

**NetApp
Building 2
6 Megawatt Data Center
Engineering Lab**



Owner:  NetApp™

Completion Date: January 19, 2009

CTC Design's Role

Commissioning

HVAC System Description

This project scope is the addition of a new lab on the first floor of Building 2 having the capacity to house 720 racks at 8 kVA of electrical power per rack, 5.76 MW. This lab layout consisted of a hot aisle and a pressurized cold aisle. Cold air is being supplied to the cold aisle, and being returned from the hot aisle. The mechanical system consists of a water cooled chilled water plant (Four chillers and eight cooling towers) with fourteen air handlers in the space, and a 720k CFM relief fan for outside air.

Team Leader Comment

Energy conservation and sustainability was on top the list for project objectives. 100% outside air economizer is designed into the mechanical system. It's anticipated the system will be in 100% economizer mode 6,000 hours per year. PG&E reviewed the calculation and awarded a \$1mil rebate check to Netapp for the energy savings.

The chiller plant has four 600 ton chillers with a variable primary pumps and eight cooling tower. The lab is equipped with two generators and UPS system.

Project References:

References available upon request.