SCHETTER ELECTRIC, INC.
Contracting and Engineering

Wavve Data Center (now Herakles)

Sacramento, CA

Owner:	**Herakles** **Cindy Rodoni (916) 679-2100**
Architect:	**Callison Architects, Inc.** **David Zeitlin (206) 623-4646**
General Contractor:	**DPR** **Dave Dovichi (916) 568-3434**
Electrical Engineer:	**Schetter Electric, Inc.** **Engineering (916) 446-2521**
Building Size:	**92,000 square feet**

Job Narrative:

The Wavve Data Center project represents the current state of the art Redundant Reliability Systems characteristic of the Data Center colocation facilities currently being constructed.

The Wavve project presented an uphill challenge to design and build out Phase I of the project by September 15, 2000 with a Design start date of April 2000 and a Construction start date of July 2000. Phase 1 was the complete build out of the 8-megawatt distribution and generator systems, and the completion of 12,000 square feet (dual redundant 750 kW UPS units) Raised Floor and the 10,000 square feet office space. The balance of the Phase 1A Raised Floor Area of 20,000 square feet was completed by November 15, 2000. Phase 2 started in April of 2001 was the completion of the remaining Raised Floor Area of 22,000 square feet for a total of 54,000 square feet of colocation raised floor and the remaining 28,000 square feet office, Global Network Operations Center and Support areas and was completed on July 2001.

The project included (1) one 10-megawatt SMUD 69 kV substation that feeds (1) one 12 kV primary distribution switchgear. The 12 kV-primary distribution switchgear feeds (4) four 3000-amp, 480-volt distribution switchboards and provides for (1) one future. The 480 volt distribution switchboards feeds (6) primary 500/750 kW UPS systems (providing power to (30) thirty 200 kW PDU systems) and one parallel 750-kW UPS standby (static transfer) maintenance and emergency back up system N+1 redundancy. The Utility power emergency generator backup system consists of (4) four 2000 kW diesel generators with (1) one future for N+1 redundancy incase of Utility power failure. This emergency generation system distributes generator power to the 480-volt distribution switchboards via a 10,000 kW paralleling distribution switchboard. All this is to provide 75-watts per square feet to 30,000 square feet Raised Floor Area and 50-watts per square feet to 24,000 square feet Raised Floor Area. Additionally, a complete fire alarm system, and security/access control system and computer/communications raceway system was provided.