



SCHETTER ELECTRIC, INC.
Contracting and Engineering

Telegis Networks
Sacramento, CA

Completed July 2008



Owner:	CDCG Ron Hughes (916) 928-7900
Architect:	Gary Roberts Architects Gary Roberts (916) 498-7900
General Contractor:	MarketOne Builders James Fitzgerald (916) 928-7474
Electrical Engineer:	Schetter Electric, Inc. Engineering (916) 446-2521
Building Size:	38,000 square feet

Job Narrative:

The Telegis Networks Collocation Facility is a statement in electrical system redundant reliability, characteristic of the Data Center gold rush of the new millennium. The facility was in its concept, intended to be a flagship of the burgeoning market. It was designed under an extremely tight schedule from concept to permit, spanning approximately eight weeks. The construction phase followed rapidly on an accelerated schedule for occupancy within five months.

The project included a new primary voltage metered utility service (21kv) that fed (3) 750kva pad mount transformers and (3) 3000 amp 480 volt main switchboards for two primary and one reserve services to provide the N+1 redundancy desired. Similarly these switchboards each fed one of the (3) 750kva UPS units. Each switchboard was also provided with back up power from one of the (3) 1500kw diesel generators at the site. The power to the collocation floor was distributed through automatic static transfer switches (ASTS) at each of the (10) power distribution units (PDU) at the raised floor area to further augment the redundant power scheme. An A and B 400amp-48v DC power plant was also provided. A 1500kw fixed load bank permanently wired and interlocked was provided for testing of the UPS units and generators.

In addition to the difficult task presented by the schedule, a great portion of the service installation occurred within close proximity of a Light Rail Transit system tracks and beneath overhead high voltage utility transmission lines which limited crane access for the pad mount transformers and generators. Utility installations for primary service and fiber ducts were horizontally bored under the Light Rail tracks and the busy downtown street of the project location.

The project included state of the art security, access, intrusion, and CCTV systems. The project also included a complete site fire alarm system, pre-action fire sprinkler controls, FM200 suppression system, and VESDA detection control system.