IP Networks, Inc.

Utility-based Last Mile & Large Scale Private Telecommunications Networks – Designed for Mission Critical Networking Requirements

"""Fiber: Route redundancy versus carrier redundancy - there is a difference"

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Proprietary and Confidential
Data Centers and Other Mission Critical Facilities

- Mission critical facilities such as data centers are designed with redundant and highly reliable infrastructure such as UPS systems, backup generators, fire suppression systems, security systems.
- Mission critical facilities are designed to survive seismic events and are typically outside of flood zones.
- Design criteria dictate no single points of failure and operational carry-through after major natural disasters such as earthquakes.

Critical Questions?

- How redundant is your telecommunications network?
  - Last mile and building access. Common carrier or cable?
  - Long haul network. Common carrier or cable?
  - Connections to other data centers. Common carrier or cable?
  - How many single points of failure?
Does your Mission Critical Facility have Single Points of Telecommunications Failure?

- Telecommunications carrier redundancy is not necessarily physical redundancy because of shared fiber cable, conduit and other infrastructure such as common trenches.

- IP Networks incorporates diverse paths into its network that are independent of other telecommunications infrastructure.

- IP Networks enters buildings through electrical conduits or completely separate paths.

- IP Networks can offer internal N-1 and N-2 redundancy.
IP Networks
Infrastructure Diversity

- Diversity at the Building Access and Entry Level
- Diversity at the Local Loop Level
- Diversity at the Regional Backbone Level
- Uniquely protected Infrastructure (e.g. ‘deeper’ in the street)
IP Networks Local Diversity
Using Separate Access Points at a Building Level
IP Networks Area Diversity
Using Separate Access Paths from Backbone Fiber
IP Networks Regional Backbone Diversity
Using Separate Infrastructure based on Electric Utility Infrastructure that is redundant to Common Telecommunications Infrastructure such as the El Camino Trench
Potential 1100 Space Park Alternative Fiber Access Options
IP Networks
Unique Value Proposition

Build and operate the telecommunications network that meets the mission critical networking requirements of Silicon Valley, metro San Francisco and Beyond

- By leveraging infrastructure installed by utility companies
- Create the most efficient and flexible all-optical platform
- Build and operate Last Mile and Large Scale Networks at unparalleled reliability and cost effectiveness
- IP Networks provides telecommunications networks that are fully independent of the traditional telecommunications infrastructure.
- Value proposition created around Business Continuity & Disaster Recovery at multiple levels
Major Data Centers Already Connected to IP Networks or planned in 2006
IP Networks
PG&E Relationship

Openly promoted as PG&E’s strategic partner
- PG&E 2004 ISTS Annual Report “… strategic partnership with IP Networks.”

Irrevocable agreements
- California Public Utilities Commission (CPUC) approved
- Allows IPN blanket access to install new fiber optic cabling in all conduit, poles, towers & substations
- Encompasses over 200,000 miles of right-of-ways

Access to utility infrastructure that serves 1 in 21 Americans
- Guaranteed building lateral and street facilities
- In addition to new fiber installations, able to lease over 1,000 route miles of existing Last Mile and Backbone fiber optic networks
- Internal communications network qualifies as 4th largest telecommunications system in California only behind AT&T/SBC, Verizon & State of California