

CRITICAL FACILITIES ROUND TABLE

JUNE 20th AGENDA

VISA INTERNATIONAL
900 Metro Center Blvd. Foster City, CA. 94404
(Conference Room 5B)
650-432-3200

Many thanks to Karen Schacht of VISA INOVANT for providing the facilities and communications necessary to support this meeting of the Critical Facilities Round Table.

9:00 - 9:15 Welcome and Introductions of Individuals (Name, Background, Area of Focus)
(by Karen Schacht, Bruce Myatt & Charles Krieger)

9:15-9:30 Review of Last Meetings Minutes (by Bruce Myatt & Charles Krieger)

- Charter/ Organization/ Membership
- Next Meeting Date/ **October 10th** (not 17th) /at a participant's facility
- Should we establish a web site?

9:30-9:45 Update and feedback from presenters at last meeting, by:

- Jonathan Jew, **ANSI Tiering Standards for Data Centers**
Mr. Jew is Principal of Jonathan Jew Associates, an IT consulting firm in San Francisco
- Richard Greco, **Challenges of Operating High Density Data Centers**
Mr Greco is National Director of Operations, Maintenance and Test Engineering at EYP Mission Critical Facilities in San Francisco

9:45-10:30 **NEW "Arc Flash" Requirements by NEC 2002/NFPA 70**, a discussion on the methods of compliance through system analysis and labeling for electrical facilities, by Edmund Elizalde. (Introduction by Charles Krieger)

Mr. Elizalde is Managing Principal of EYP Mission Critical Facilities, Inc. Los Angeles office. Mr. Elizalde has over 20 years of experience in the design and analysis of complex electrical distribution systems in data centers and similar critical facilities.

10:30-12:00 **NEW "Thermal Guidelines for Data Center Facilities and Equipment**, a study in progress by the ASHRAE TG9 Committee, HDEC (High Density Electronic Equipment Facility Cooling Group) by Magnus Herrlin, PHD. (Introduction by Bruce Myatt)

Mr. Herrlin is co-author of the 2002 National Electronics Manufacturing Initiative (NEM1) Roadmap on Thermal Management, and Committee Officer for ASHRAE Task Group 9 HDEC (High Density Electronic Equipment Facility Cooling). Magnus is a Mechanical Engineer and a Certified Energy Manager by the association of Energy Engineers.

Other members of the ASHRAE-HDEC committee representing major US manufacturers indicated that they will be at meeting or be involved via telephone conferencing. (Mr. Herrlin will make introductions.)

(Over)

A draft of the ASHRAE TG9 HDEC guidelines dated 5/30/03, has been issued to the ASHRAE committee for distribution and comment. Comments are due on June 24th. We will collect comments from those of you who prefer to contribute to the group's feedback instead of on-line, so please come prepared.

12:00-12:15 Future CFRT Programs (by Charles Krieger and Horst Pfendt)
Dr. Chandrakant Patel (Principal Scientist) of Hewlett Packard Laboratories has extended an invitation to our group, to tour his facility in Palo Alto to view and discuss their test installation, and methods (as one of our regular meetings or at a different time).

The following additional topics are suggested for consideration:

- Establishing a "Masters" list of engineers who are experienced in the design and commissioning of computer center and high tech facilities
- Seismic fastening of equipment and floors for data centers
- Retrofitting and hardening of existing data centers, in line with new electrical/cooling/ space code requirements and new concepts.
- Comparative analysis/function of the various UPS systems on market
- Critical assets protection through risk management, including physical security and alarms, fire suppression and hazards mitigation.
- Co-generation, distributed generation, self generation
- Other topics of interest

12:00 – 12:15 Close (by Steve Johnson)

12:15 No Host Lunch (Visa Cafeteria) space has been set aside for the group

Founders of the CFRT:

Charles H. Krieger, PE, [retired], formerly President & CEO of Charles H. Krieger and Associates
Horst Pfendt [retired], formerly with Chevron
Bruce Myatt PE, with EYP Mission Critical Facilities
Steve Johnson, formerly SVP with Frontier Global Center