CRITICAL FACILITIES ROUND TABLE

(CFRT)

MEETING MINUTES 6/30/03

VISA International, Foster City, CA Thank You Karen Schacht

OPENING

Founding Members:
Charles Krieger
Bruce Myatt
Steve Johnson
Horst Pfendt

INTRODUCTIONS

40 Attendees from 25 companies

REVIEW PREVIOUS MINUTES & PRESENTATIONS

CHARTER

To provide an open forum for our members and their guests to share information and to learn about new mission critical technologies, with the intention of helping each member improve in technical expertise and develop solutions for the challenges of their day-to-day critical facilities operations.

ORGANIZATION AND OPERATIONS

- Membership: Critical Facilities Operators with no cost for membership. Guests: From members' corporate real estate, facilities, and IT groups.
- 2. Meetings: Quarterly frequency (Hosted by members & volunteers)
- Web Site: Content & hosting
- 4. Presentations: Variety of topics by operators, consultants, and vendors.
- 5. Certification and registration for Data Center engineers www.idcp.com
- 6. Communications: E-Mail distribution of all information.

PRESENTATIONS

- 1. <u>Critical Facilities Tiering Standards</u>, by Jonathan Jew Review of development and next steps with these standards. More info or comments on the TIA standard can be presented to Charles or Jonathan at jew@j-and-m.com.
- 2. <u>High Density Data Center Design and Operations</u>, by Rich Greco Overview of perspective. Faster and generation of more heat is the trend. Equipment physical compacting because of industry and manufacture needs. Models for cooling For more info contact Charles or Rich at rgreco@eypmcf.com.

NEW BUSINESS & CLARIFICATIONS TO MINUTES

- 1. Vendor Participation: Vendors granted committee membership, leadership and participation, but no roundtable membership or quarterly meeting participation.
- 2. Purpose: To proactively influence the critical facilities industry, it's management, it's institutions, and it's regulators as a fundamental objective of the group's activities.
- 3. "Best Practices": Members and vendors to share best practices in an open forum with the group and have a volunteer collect and present the collected expertise.

- 4. Committee Formation: Attendees were invited to indicate a preference for topics of interest. (see table below) Preferences can be changed, and members can participate in more than one committee. Committee formation will begin before next quarterly meeting. (Further discussion below under closing.)
- Web Approval. Charge of \$ 200.00 for website setup
 \$10. contribution per member (reference CFRT web site) to:
 Charles Krieger, 1790 Forestview Ave., Hillsborough, Ca 94010
 When we have reached the goal to fund the Web Page we will notify all of the address.
- 6. High Density Data Center Issues Next Step & Committee Formation
 Hewlett Packard Test Facility/ Data Center Tour Friday, September 5 (Invite to Come)
 This is also the first meeting of the High Density Data Center Cooling Committee.
- 7. Next Quarterly Meeting Thursday, October 16 at Bank of America, San Francisco Data Center, 1455 Market Street (Invite to Come)

NEW PRESENTATIONS

Copies of these presentations will follow in subsequent e-mails to reduce e-mail size. Please reply to this e-mail if you do not receive the presentations within 24 hours.

- 1. <u>"Arc Flash" Requirements by NEC 2002/NFPA 70</u>, by Edmund Elizalde. A discussion on the new regulatory requirements and methods of compliance through system analysis and labeling for electrical facilities. For more info contact Edmund at <u>eelizalde@eypmcf.com</u>.
- 2. <u>"Thermal Guidelines" for Data Center Facilities and Equipment, by Magnus Herrlin, PhD</u> A study in progress by the ASHRAE TG9 Committee, HDEC (High Density Electronic Equipment Facility Cooling Group). For more info contact Magnus at <u>m.herrlin@att.net</u>.

A draft of the ASHRAE TG9 HDEC guidelines dated 5/30/03, was issued to the ASHRAE committee for distribution and comment. Comments were due on June 24th. Magnus provided instructions on how to access and comment on the procedures on line.

FUTURE MEETINGS AND PRESENTATIONS

- 1. High Density Cooling
- 2. Seismic Needs batteries, floor, equipment, Products available, standards.
- "Masters" list of engineering UPTIME Certification, Architecture Design, Commissioning
- 4. Hardening of data centers
- Operation of Live Electrical services for installation or repair. "Can't Go Down" Banning the electricians that work on these facilities
 IT – dual cord design evaluations
- 6. Existing data centers and retrofitting for evaluation for OSHA (e.g., Arc Flash Req.)
- 7. Name Plate Ratings on Equipment Thermal outputs.
- Furniture Requirements
- 9. Engaging, enforcing and encouraging the principles gleaned.
- 10. More space vs. more power/cooling
- 11. Include Insurance Carriers in standardization documentation
- 12. Levels of Security
- 13. Emergency Systems
- 14. Vendor Presentations
- 15. Co-Generation/ Self Generation

CLOSING

This is a **Round Table** – Attached are the names of member attendees and interests that you expressed in technical issues and committee participation. The founders of the group will provide initial leadership to help establish committee working group membership and set up early

meetings ... with the understanding that committee members will eventually select their own leadership and methods of operation to discuss, plan, develop, control and present committee deliverables to our group. Some initial ideas are:

- 1. Team leadership (2 Persons + a Recorder) establish goals, information and deliverables to be shared with the Roundtable.
- 2. Have e-mail communications, meetings, and white paper collections, to gather and review and to recommend the direction that want to take to have a positive impact on the way our industry operates.
- 3. Present results at future meeting and receive suggestions on how to take our collective wisdom to the rest of our industry.
- 4. Lead the way in presenting our research, findings, and recommendations to the American critical facilities industry.
- 5. Other issues like administration, web site data management, committee membership and group evaluation.

Next Quarterly Meeting/ Hosts - Bank of America/ October, 2003

Thank you for your contributions! Charles Krieger/ Bruce Myatt/ Horst Fendt/ Steve Johnson

Name	Topic of Interest	Member Y/N	Committee Help
	ategories - General (1) Cooling (
Andy Broer	DC Layer 1 Cabling Design		Not Yet
	Managing Facilities and IT		
Douglas Alger	relationships		In future
	Data Center Facilities		
John Arnold	Engineering	1	Yes
Ven Holalkere	Data Center Cooling	2	Yes
Gary Fisher	Data Center Inftrastructure		In future
	Earthquake / Thermal Power		
Dennis Symanksi	Conditioning		yes
Donald T. Lee	Data Center Inftrastructure		Yes
Brian Tharp	Room Load Capacity	2	Yes
John Pappas	High Density Cooling	2	Yes
	High Denisity Retrofit, OSHA		
Karen Schacht	Labels, manuals.	3	Yes
Ron Kalich		3	Yes
Ted Cunningham		3?	
Paul Walker	MEP Infrastructure	1	
Pamela Brigham	MEP Expansion	1	
Ellis Milano	Standards	3	Yes
Tim Coats	Standards	3	Yes
Mitsi Bender	Thermal Management	2	Yes
Enrico Lopez	MEP Standards	3	
Jeff George	Standards	3	Yes
	Thermal Management		
Magnas Herrlin	Disaster Recovery /	2	Yes
Wendy Mudzinski	Contingency Management	1	No
Robert F Richard	General	1	Yes
Johathan Kopp	Thermal / Power	2	No
	Thermal / Power		<u> </u>
Bob Seese		2	Yes
Pat Moylan	Thermal / Power	2	Yes
Mike Bushne			No
Jeff Tanner	Cooling	2	Yes
Horst Pfendt	Asset Protection	1	Yes
Jonathan Jew	Data Center Standards	3	Yes
Rich Greco	All Data Ctr	1	Yes
Jack Montanaro	General Data Center	1	Yes
Marco Magarelli	Data Center Inftrastructure	1	