



RMC XPress

Rocky Mountain Chapter

The leading knowledge exchange for those who design, build, use and maintain mission-critical enterprise information infrastructures, 7x24 Exchange's goal is to improve end-to-end reliability by promoting dialogue among these groups.

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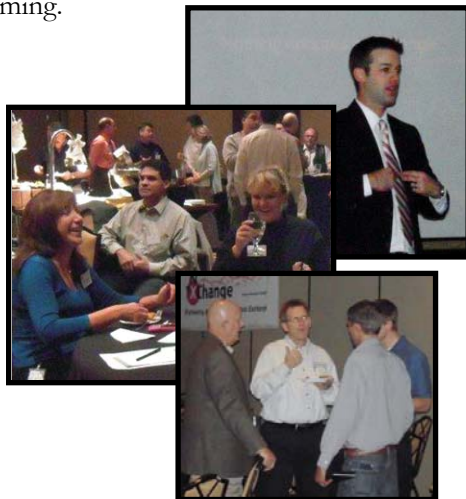
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2009 Fall Social

“Colorado Weather Forecasting”

We had another wonderful Fall Social this year at the Omni. Meteorologist Ashton Altieri from 9News was our keynote speaker and provided a very interesting view into Colorado weather forecasting. Ashton took us behind the scenes showing what data he looks at and where it comes from to enable Ashton to predict his weather forecast. The Rocky Mountains really do play a large role in our Colorado weather which is why there are times the weather will take a turn that no one saw coming.



After some discussion, the board has decided to make the Fall Social more of a social event and return back to a dinner format. This will make it easier for spouses and significant others to attend. As the year progresses, we will be sending out information on the 2010 Social.

A Note from the President

It's hard to believe we are already entering a new decade, the movement and storage of data has escalated far beyond what most of us envisioned as we entered the year 2000. In the last decade, data center energy consumption has

more than doubled as the IT industry sought ways to maintain continuous availability 7x24. As we enter the new decade, IT professionals and the entities that maintain facilities must find the right balance between continuity and efficiency.

It's time to adopt a new philosophy and start moving away from the traditional watts-per-square-foot measurement and move towards a watt-density-per-rack approach. This will enable more control over the environment, allowing to better determine where air conditioning is needed, rather than simply cooling certain number of watts per square foot throughout the entire data center. It's difficult to clearly predict where the technology will be moving in the coming decade. Who ever thought the cell phones today would have more memory and computing features than most laptops had in 2000. As systems become smaller and more powerful, energy consumption and cooling will be the biggest hurdles for the IT and facility professionals going forward.

This year we kick off a new decade in which 7x24 will continue to keep our membership updated in this extremely fast paced field of ever changing technology.

Bob Maas, President
7x24 Exchange Rocky Mountain Chapter

7x24 Website

To obtain information on current events, future programs, joining the RMC (obtaining a user-friendly membership application), or contacting us with any questions, please visit our website at: www.7x24exchangerm.org.

2010 Spring Conference

The program on DC Systems, to be held on March 9th, will explore battery and flywheel options that can be utilized with UPS systems. Here is a summary of the 4 presentations:

VRLA vs. Flooded Batteries for UPS Applications

Presented by Erik Jones of C&D Technologies

- Review of the fundamental differences between VRLA and flooded lead acid battery technologies as it relates to UPS applications
- Review of all the factors that should be considered in selecting the best technology for the application

Applying VRLA Batteries in the 2010 Data Center

Presented by Doug Dethmers of DEKA Batteries

- Review VRLA technology "101"
- 10 yr. vs. 20 yr. design life
- VRLA design parameters
- 20 yr Flooded vs. 20 yr VRLA
- Battery Sizing "End of Life" Calculations
- Future of VRLA

Get the Lead Out: Sustainable Energy Storage for Power Quality/Reliability

Presented by Keith Field of Pentadyne

- With more than a decade of proven reliability, flywheel energy storage technology has proven out as a green approach to increase total UPS system reliability by an order of magnitude while cutting long-term costs in half.
- This presentation will provide real-world customer studies of flywheel-exclusive applications and applications in which flywheels have been utilized in conjunction with traditional batteries.



2010 Spring Conference (continued)

Green Solutions with Flywheels in Lieu of Batteries

Presented by Johnny Gonzales of Vycon

- Review of the advantages of utilizing flywheel technology instead of batteries as a Green Solution for the Power Quality needs.
 - o Weathering the Storm – Flywheels light the stage in Greening Up power protection
 - o Benefits of reduced space and floor loading requirements
 - o Review of the cost savings
- Review of actual flywheel applications in the following types of data centers
 - o Tier 3A Data Center
 - o Green Solution – 2 MEGA WATT Data Center

The Summer and Fall programs will be announced as information becomes available.

Colorado Springs Satellite Program

Our spring program for the Colorado Springs 7x24 Exchange Satellite will be held on April 27, 2010 at the Olympic Training Center. The program will consist of "Generator Sets, Preliminary Design & Maintenance," presented by Earnest Glaser of Rocky Mountain Cummins, "Five Reasons Gen Sets Don't Start," presented by Kevin Dipasquale of Rocky Mountain Cummins, and "Power Transfer Applications and Considerations," presented by John Starks of Russelectric.

This high powered program will provide some insight into many of the issues that facility managers deal with on a daily basis.

Additional registration information and other specifics will follow in the near future.

2009 Fall National Conference

The theme of the 2009 Fall Conference for 7x24 Exchange International was "End-to-End Reliability: The Changing Landscape of Data Centers." Many of the programs reviewed the increased use of free cooling and the increased efficiency of direct liquid cooling of equipment compared to air systems. The latest ASHRAE guidelines and heat transfer characteristics and paths were emphasized. A unique process that involved a design requirement for equipment manufacturers to disclose full efficiency details, together with a scorecard process for selecting the best equipment, and followed up by measurement and verification of efficiency after installation, was also presented.

The determination of the appropriate Tier classification for a facility will have a major affect on the budget, and rationalizing infrastructure, including container-based solutions together with active power management will reduce both capitalization and operating costs. Cloud computing is becoming more popular and is anticipated to be the ultimate realization of virtualization to maximize the available infrastructure and connected systems. Finally, on-board battery backup of servers with 2 minute lithium ion is a new concept that may reduce the need for many centralized UPS equipment systems.