

# Critical Facilities Round Table (CFRT)

## High Density Data Center (HDDC) Committee Meeting

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Dear Members and Guests,

The 7<sup>th</sup> quarterly HDDC Committee Meeting will take place on June 3, 2005 between 8:30 a.m. and 2 p.m. Our host this time is the National Energy Research Scientific Computing Center (NERSC) and Lawrence Berkeley National Laboratory (LBNL). The topic of this meeting is Air-Side Economizers: Benefits and Drawbacks. Fundamentals and practical experiences as well as a tour of the NERSC are included in the program.

NERSC is the flagship scientific computing facility for the Office of Science in the U.S. Department of Energy. As one of the largest facilities in the world devoted to providing computational resources and expertise for basic scientific research, NERSC is a world leader in accelerating scientific discovery through computation. Users of the NERSC Center include researchers in DOE laboratories, universities, industry, and other Federal agencies.

The meeting will take place at the Oakland Scientific Facility, located at 415 Thomas L. Berkley Way (formerly 20th Street) @ Franklin Street, Oakland, CA 94612. Room 238 on the second floor. Entry into the facility is by card access. Please ring the front doorbell and inform security that you are a meeting attendee.

Downtown Oakland is serviced by the [Bay Area Rapid Transit \(BART\)](#) system. The Oakland Scientific Facility is conveniently located within close walking distance of the [19th St. Oakland Station](#). For driving directions to the Oakland Scientific Facility, please utilize [MapQuest](#). No parking is available at the facility, but there are parking lots operated by Douglas Parking located within close walking distance. The charge is \$11 for a full day or \$1 for every 20 minutes. Information, including maps, can be found at [www.douglasparking.com/oakland\\_kaiser.html](http://www.douglasparking.com/oakland_kaiser.html) and [www.douglasparking.com/oakland\\_1999harrison.html](http://www.douglasparking.com/oakland_1999harrison.html)

**NOTE! Unfortunately, this meeting is limited to 25 attendees. So, first come—first serve...**

### AGENDA

- 8:30 a.m. Continental Breakfast**  
Thanks to NERSC for providing today's continental breakfast
- 9:00 Welcome to NERSC**  
Michael Banda  
Computing Sciences Deputy  
Bill Kramer  
NERSC Division Deputy and General Manager
- 9:05 HDDC Committee business.**  
Dr. Magnus K. Herrlin and Mr. Bruce Myatt
- Summary of last HDDC meeting at Johnson Controls
  - Meeting Minutes

- Future HDDC programs
- Summary of last CFRT meeting
- Summary of future CFRT programs

**9:30**            **Background**  
Bill Tschudi  
Program Manager  
LBNL

- LBNL data center energy efficiency research
- Investigation of air-side economizers

**9:45**            **Air-Side Economizers and Equipment Facilities—A Happy Marriage?**  
Magnus K. Herrlin, Ph.D.  
Principal  
ANCIS Incorporated

Magnus spent 10 years with Telcordia Technologies managing energy-efficiency measures for the Regional Bell Operating Companies. Air-side economizers are universally used in Telecom Central Offices. Magnus will discuss key characteristics of different types of air-side economizers and summarize years of experiences in utilizing outdoor air for “free” cooling in equipment facilities.

**10:15**           **Some Recent Air-Side Economizer Experiences in Data Centers**  
Peter Rumsey, P.E.  
President  
Rumsey Engineers, Inc.

Air-side economizers are not common in traditional Data Centers; this is in sharp contrast to Telecom Central Offices. Recently, however, there is renewed interest due to overall energy-efficiency concerns. Peter will discuss some recent implementations of air-side economizer cycles in Data Centers, and he will also report on short-term experiences from actual installations.

**10:45**           **Round Table Discussion**

We have shortened the presentations to provide ample of time to discuss Air-Side Economizers. Bring your questions!

**12:00**           **Working Lunch**  
Thanks to NERSC for providing today's lunch.

**1:00**            **Tour of NERSC Center**

**2:00**            **Adjournment**

Hope to see you there!

Dr. Magnus K. Herrlin  
Chair HDDC  
Principal  
ANCIS Incorporated  
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Plan to attend? Please email:

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Secretary HDDC  
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