

ASHRAE Ottawa Valley Chapter

Chapter Meeting # 6 March 2004 Draft



Meeting Date: Tuesday March 16, 2004
Location: Capone's Restaurant, 1701 Woodroffe Avenue, Nepean
Presiding Officer: President Jason MacMurdo
Attendance: Total: 60 Guests: 10 Students: 5
Theme Night: Research
Technical Session: Tour of National Research Council's Cogen System and Absorption Chiller
Table Top: Enbridge displayed information on energy efficiency projects in industry and incentives available towards the implementation of HVAC energy efficiency improvement projects, like boiler room improvement projects and energy studies.

Group Master's presented the York's steam centrifugal chiller with fully packaged controls.

Program: Absorption Chillers
Speakers: Dave Eaton, P.Eng., Service Operation Manager, Trane Ottawa
Joel Primeau, P.Eng., Account Manager, Trane Ottawa

Prepared by: Jay Doshi – March 24th, 2004

Technical Session (3:45 – 5:15)

A tour of National Research Council's Cogen System and Absorption Chiller, located at 1500 Montreal Road was undertaken. This facility is located at Blair and Montreal road. The tour started with a brief overview of the 4.5 MW Cogen system and 500 Ton Absorption Chiller by Mr Subash Vohra - Director General, ASPM, NRC. Then the participants were divided into two groups and took turns in visiting the Cogen system and the absorption chiller for Inlet Air Cooling to boost performance in summer.

Social (5:30 – 6:30)

Business Session (6:35 – 6:50)

- President Jason MacMurdo opened the meeting and welcomed all in attendance
- President Jason MacMurdo introduced the OVC 2003/2004 Executive and the Board of Governors.
- Glenn MacLean introduced the guests.

Dinner (6:50-7:30)

Business Session-Continued (7:30-7:50)

- The theme for the evening was Research.
- Jason MacMurdo introduced the table top displays and requested Mr. Michael Fakhouri to talk about the display from Enbridge.
- Mr. Fakhouri informed that there were incentives for the reduction/savings of gas usage. Enbridge

- will also pay for part of the cost of an energy audit.
- Mr. Tony Doyon from Master's Group talked of the York's steam centrifugal chiller with fully packaged controls.
- Bob Kilpatrick talked about technical session which was a tour of National Research Council's Cogen System and Absorption Chiller. He informed that Subash Vora was the host for NRC and the tour visited the turbine, heat recovery boiler and boiler plant. He also informed of the discussions and observations on the absorption chiller. He indicated that there were about 25 to 30 people in attendance of the tour, which was well received by all, who attended.
- Jason talked about the TEGA Chapter and the importance of Handbook reviews. He also informed of the new Library setup by ASHRAE at OCA (Ottawa Construction Association) will the Chapter is trying to increase. He requested all present to participate in all of these TEGA activities.
- Jason introduced RVC for Research, Frank Bann, who described the benefits of ASHRAE Research. Frank asked all presented to call him or Lan Chi if there are any questions on ASHRAE Research activities.
- Jason informed all members on the upcoming ASHRAE Curling special event.

Break (7:50-8:00)

Evening Program (8:00-9:00)

Program: Absorption Chillers
 Speakers: Dave Eaton, P.Eng., Service Operation Manager, Trane Ottawa
 Joel Primeau, P.Eng., Account Manager, Trane Ottawa

Jason introduced the speakers for the evening, Joel Primeau and Dave Eaton of Trane Ottawa.

Joel started the presentation by reviewing the fundamentals of the Vapor Compression Cycle and the Absorption Cycle. The presentation described how absorption chillers work and discussed design considerations, applications, and cite case studies. He then presented the various types of absorption water chillers along their COP (coefficient of performance). Control issues were also reviewed.

With the uncertainty of the electricity generation sector, more and more owners and designers are considering the viability of absorption chillers for their construction or renovation projects. The absorption chiller uses gas burners or excess heat in the form of steam or high-temperature hot water to generate chilled water. This presentation reviewed the feasibility and considerations in selecting the absorption chiller on projects.

Dave presented the maintenance considerations and problems associated with the operation of the absorption chiller such as crystallization. He then addressed application considerations for the absorption chiller with examples from the pulp and paper industry.

- Jason thanked our guest speakers for their presentation and presented them each with a gift.

- Jason MacMurdo reminded all present of the next meeting on April 20th, 2004.
- With no other business at hand, Jason MacMurdo adjourned the meeting 9:15pm.

Distribution:

Board of Governors

All RVCs

DRC

Please review the minutes and report any errors or omissions in writing to Jay Doshi.