



2009 WISCONSIN

Renewable Energy Summit

Renewables, Sustainability, Energy Efficiency,
Social Responsibility, and Green Energy Practices

Solar Thermal & Geothermal Session 15-2(One)

DATE:

Breakout Session 15-2 (ONE):

Time:

Presenters:

WEDNESDAY, MARCH 25, 2009

3:45pm - 5:30pm

Central Plant Geothermal Heatpump Design and Application

Doug Bergmann, Masters Building Solutions

The application of geothermal heatpump technology is now possible for large scale projects with a central plant approach. As geothermal heatpump technology continues to evolve its application for larger projects has become viable. This presentation will discuss the design and application of a central plant geothermal system for one of the largest geothermal projects located in the State of Wisconsin. The project highlights:

- Central Geothermal Heatpump Plant Producing Hot Water and Chilled Water For A Campus Application
- Significant Efficiency Gains vs. Conventional Heatpump Technology
- 85 Miles Of Buried Pipe Serving The Geothermal System
- Geothermal Free Cooling System To Serve Winter Time Cooling Loads
- Centralized Maintenance

Heat Recovery

Mark Platt, Multistack

Presenter Biographies:

Doug Bergmann

Doug Bergmann is a past president of the Madison, WI ASHRAE chapter and has been involved in design and application of energy efficient HVAC projects for 15 years. He teaches several courses through the University of Wisconsin Department of Engineering Professional Development and has spoken at several ASHRAE meetings.

- Geothermal Heatpump Central Plant Design & Application
- Laboratory Design & Application Of Energy Recovery Technologies
- Industrial Design & Application Of Energy Recovery Technologies
- Energy Efficient Custom Air Handler Design & Application