Geothermal Heating and Cooling Innovations: Design, Financing and Regulation

When: May 14, 2013

8:00 a.m. - 4:45 p.m.

Where: Red Lion Hotel

1021 NE Grand Ave Portland OR 97232

Cost: \$195

Sponsor: American Ground Water Trust

Contact: American Ground Water Trust 800 423-7748 between 9:00 a.m. - 5:00 p.m.

Eastern Standard Time or website www.agwt.oprg (conference/workshops) for

registration and more information

Continuing education credit (CEC) has been assigned as follows:

Agenda:

- "Resource Sustainability and Geothermal Heating and Cooling Concepts" 35 minutes, Garret Graaskamp, American Ground Water Trust. **0.5 CEC**
- "Status of the Geothermal Industry" 40 minutes. The instructor is Ted Clutter, Geothermal Exchange Organization. **0.5 CEC**
- "Reducing First cost Barriers Geothermal HVAC Project Financing Innovations" 40 minutes. The instructor is Eric Howarth, Electricity and Gas Industry Association, California. Zero CEC
- "GeoExchange Loop Ownership by Utilities The Western Farmers Electric Cooperative Experience" 40 minutes. The instructor is Mark Faulkenberry, Western Farmers Electric COOP. **Zero CEC**
- "More than a 'hole in the ground' Drilling techniques Logistics and Grout" 40 minutes. The instructor is Kirby Donald, Baroid IDP. **0.5 CEC**
- "Designing with Variable Frequency Drive Compressor Geothermal Heat Pumps -Special Considerations" 40 minutes. The instructor is Sean Dillon, WaterFurnace International. 0.5 CEC
- "Hybrid systems Innovative GHP/GHEX System Design" 40 minutes. The instructor is Gene Slavens, ClimateMaster. **Zero CEC.**
- "Designing Ground Loop HVAC Systems Pump Energy Optimization Using Variable Frequency Drives" 40 minutes. The instructor is Andrew Chiasson, Oregon Technical Institute. **Zero CEC.**
- "Net-Zero Design Principles" 40 minutes. The instructor is Paul Bony, ClimateMaster.
- "Commissioning a GHP System Missing the Last Step Costs Money" 40 minutes. The instructor is Alan Wright, Environmental and Engineering Services, Inc. **Zero CEC.**
- "Geothermal HVAC Cost Evaluation Examples from the Columbia River Gorge" 40 minutes. The instructor is John Geyer, John Geyer & Associates, Inc. **Zero CEC.**

• "Wrap-up and Adjourn" 10 minutes.